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Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

VOL. IV. CHICAGO, MARCH 7, 1885. NO. 10.

ORIGINAL ARTICLES.

THE RELATION OF THE LITERARY TO THE MEDICAL COLLEGES.

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A paper read before the Second Annual Meeting of the Ohio State Sanitary Association, held at Columbus, February 5 and 6, 1885.

MR. PRESIDENT AND GENTLEMEN OF THE ASSOCIATION:

There lies upon my study-table a report, by the Illinois State Board of Health, entitled "Medical Education in the United States and in Canada."

Though not primarily intended for non-professional readers, it is a work whose pages I have turned a great many times during the past two years.

With a peculiar pleasure have I glanced at the names of the one hundred and thirty existing medical colleges in these two English-speaking and otherwise closely-united countries.

I have examined with great care their requirements and courses of study; have noted their list of matriculates; the states from which their patronage has been most largely drawn; and have calculated the ratio of graduates to the total number enrolled.

With no less zeal have I attempted to subdivide my sympathy over the eighty-eight institutions which have been, but are not. For many of these colleges I sorrow as those who have no hope. They are dead, and that is the only thing that can be said about them.

Others never had any life, save in the mind of some Buchanan or other as notorious victimizer of his race.

Many of these institutions, however, have had a history at once honorable to all concerned. They have merely lost their personal identity through consolidation, or have yielded to the inevitable ebb and flow of society.

Very naturally, the institutions of our own commonwealth have claimed more than their full share of attention.

In the total number of medical colleges and in the number of first-class funerals, the record of this state has been surpassed only by that of New York. Twenty-four medical colleges have been born in Ohio. Ten died in unconscious infancy, while fourteen remain the objects of a layman's anxious solicitude.

I am profoundly thankful that no State Board of Health (or of Lunacy) has ever found it necessary to write up the literary institutions of Ohio. Their record would be still more fatal to state pride and state honor. In numbers we have not been willing to be second even to New York. In quality we range from that nameless university which had, according to a late report by the Commissioner of Education, two professors, three students, and a library of one hundred and twenty-seven volumes—I say we range from this nameless university all the way up to those noble institutions whose professors and alumni are represented upon this programme and in the offices of this association.

Until recently there has been but little connection of any kind between the literary and the medical colleges of Ohio. In some instances there has been a seeming antagonism; in others, a spirit of mutual indifference. In no case have the academic and the professional been regarded as concurrent factors in a single educational system. To be sure, several of our leading universities have their medical departments, but, as I rejoice to learn, the latter are almost as free and untrammeled as where no such organic union exists.

Moreover, such a union, desirable as it is in very many respects, is found to be one of convenience rather than of necessity. It undoubtedly ensures a somewhat better utilization of the teaching force, and thus is to be commended on the score of economy.

By associating the two in the minds of the students from the very commencement of their preparatory studies, there may be a somewhat increased attendance, especially at the Medical College, but it still remains that the two schools must preserve their individuality and carry on their work separately.

It is, however, not a question of *organic* union that has led me to select this topic. If I felt qualified to discuss so important a matter I certainly am not authorized to make any overtures on the part of the literary institutions. Nor is this association prepared to receive them on behalf of the medical colleges, if tendered.

The relation between the literary and the medical colleges, if you please, between the academic and the medical men of our commonwealth which I advocate, is rather one of comity, co-operation and goodwill—a pooling of mutual interests in order: 1st. That the standard of education, general as well as professional, may be elevated.

2d. That a much larger number of college graduates may be drawn into this vocation of medicine.

3d. That scientific and rational instruction in physiology and hygiene may be given to the pupils in the universities, academies and high schools of our state.

4th. That, as a result of these reforms, the principles of hygienic and sanitary science may be made known to the entire citizenship of our beautiful commonwealth.

The time, given to me by the kindness of your committee, will not permit of more than a brief unfolding of this subject, in the four subdivisions just indicated.

I. Such a union would elevate the standard of education.

Some months ago, I received a letter from a warm personal friend—himself a member of the Illinois State Board of Health—and the one to whom was committed much of the labor of compiling their report, though his name does not so appear. From him I obtained, as it were, an inside view of these matters and gleaned certain facts not discoverable in the published report, at least not without much study and very careful comparisons.

In the prosecution of their work they have found it necessary to adopt a schedule by which to grade the medical institutions of the country. According to that standard there are, in the United States, ten first-class medical colleges. A list of these accompanies the letter.

As I am not here this afternoon to advertise any one special institution over another, it is certainly sufficient, for the purpose now in hand, to state that not one of these colleges is located within the borders of our own commonwealth.

I am well aware that it is the prevailing fashion to decry the educational institutions of Ohio, and the universities and academies far more than the professional schools. There is a deep-seated prejudice against a system that has authorized the founding of institutions which are necessarily rivals from the start, or which have so insufficient an endorsement as to preclude the possibility of their doing true educational work. No one can be a student in a New England University, for a single week, without hearing of the "Fresh-water" colleges of Ohio, just as if an institution of learning must breathe the salt air daily in order to possess the true aroma of culture.

In a late number of the *Independent*, while admitting many of the evils spoken of, I have attempted to show that the multiplication of colleges has carried the means of obtaining, at the least, a fair education into scores of communities and into thousands of homes where otherwise ignorance and vice would have prevailed. An examination of college catalogues proves that the local attendance at any of our institutions of learning is out of all proportion to the population. At one university, eighty-four out of ninety students are recorded as coming from the county in which the institution is located. At a second, 155 out of 340; at a third, 162 out of 783. The largest number of students leaving any county in the state, to attend colleges located elsewhere, is probably less than *fifty*. This argument is no less true for a medical college than for a literary one.

Granting that we are not half so bad as we seem to others, let us, nevertheless, examine in a candid spirit the grounds of these criticisms, and thus ascertain, if possible, why the medical colleges of Ohio, in which we justly take so much pride, are not crowned with the same honors by our friends in other states.

With the exception of a slight criticism as to the length of the college year, and a severe one as to the number of years in the medical course, the trouble lies wholly at the threshold. Not a few of the institutions in the so-called first class have so elevated the standard for admission as to make a preliminary training in some good classical and scientific school an absolute necessity.

In one instance an examination is required in the following branches of study, except in the case of those students who bring evidence of still higher attainments: The essentials of an English education, including composition and writing from dictation, algebra, arithmetic, including the metric system, and geometry as an elective. Latin, including translation of easy Latin at sight; German or French, with special credits for both; physics, chemistry and botany, at the option of the candidate.

At another college special honors are paid to the literary side of the student's preparation by waving all examination, in the case of those who have successfully passed the classical entrance into one of the great Eastern universities, Harvard, Yale, Princeton, or the University of Pennsylvania. As this classical entrance examination is almost equivalent to that demanded for the "B. A." degree in a number of institutions that I could name, some of which, unfortunately, are located in Ohio, you will observe that very advanced ground has been taken.*

It is very evident that the trend of the times is in favor of a higher and more complete preparation for the medical calling.

By how much do I anticipate this trend when I plant myself firmly upon the platform of requiring a diploma from some recognized university or scientific school as the *sine qua non* for entrance into the future medical college of Ohio and of the country? As we shall all step upon that platform in twenty years, if we live, why waste two decades in getting ready to move.

Nothing less than this is in keeping with the dignity of the profession or in harmony with the severe studies in its curriculum. Pardon a personal reference. It has fallen to my lot to pay some attention to the sub-science of physiology. I have now progressed sufficiently in my studies to recognize the entire boundlessness of this field for research. In the prosecution of my studies I recall and employ

* Several of our State Boards have insisted upon requirements no less severe.

Many of our medical colleges are advocating a standard which is quite satisfactory, as witness the following:

The general demand for a good preliminary education of those about to enter our profession, is shown by the recent utterances of the American Medical Association, and the enactments of several State Boards of Health. We desire to call especial attention to the fact that in several States the diplomas of such schools as do not require an examination preliminary to entrance, are not accepted as qualifying for practice.

a somewhat protracted training in mathematics taken in an Eastern university and then fail for lack of additional knowledge in this department. In mechanics and in physics I have already been compelled to go beyond the point my teachers left me twenty years ago. In all that pertains to the brain, including the mental and the moral elements of the mind, I have not had sufficient training to confidently take a single step alone. In short, I have early discovered that to be a teacher of physiology requires more preparation, at least in certain lines, than is given to the undergraduate in any American university. You will pardon me, I trust, for adding that a practitioner of medicine must understand physiology. In all this I have taken no note of those studies usually called disciplinary, if such there be in a college course, nor of their reflex influence in training the mind for severe and protracted investigations, but only of those sciences and subjects whose principles are directly employed in physiological research. Were my time unlimited this afternoon, the argument could be made much stronger by discussing the influence of academic training in general upon habits of thought and powers of discrimination, but I forbear.

I have referred at some length to the science of physiology, not because it is the *most* important study in a course of medicine, but because it happens to be the only one with which I am at all familiar. What is true for physiology, however, must be true for "therapeutics," for "theory and practice,"—indeed for all the studies in the medical curriculum.

A single example proves the rule.

The theological seminaries of our country have already been compelled by public sentiment to meet this problem of academic *versus* professional training, and have solved it (at least, so it seems to me) in a very wise and happy manner.

Having arranged a scheme of study, extending over perhaps three years, they admit to its priviledges two classes of students.

1st. Young men who have not had the advantages of a full collegiate training. They are admitted freely to the several courses of study, are examined upon the same from time to time, and, on completing the required work in all the departments, receive a certificate to that effect.

Although, in a sense, licensed to practice preaching, they are not graduates, have no voice in alumnal meetings, nor in the election of alumnal trustees. On the other hand, young men bearing a diploma and a degree from some university or college, receive, on completing the same course of study, and after passing the same examination, the degree of Bachelor in Divinity. They constitute the body of alumni and are recognized as such throughout the church.

The good results of this advanced step are seen at a glance.

The future clergymen are taught that, no matter how it may have been in the times of their fathers, the present age is demanding a cultured ministry.

The theological seminaries have received a greatly increased attendance, while at the same time scores of young men have been sent to college who otherwise would have been satisfied with a common English education.

An important difficulty must have already suggested itself to our minds. While, legally, anybody can preach, it is not so with the practice of medicine. The only door to the profession is through the medical college—the "open sesame," a degree. The laws do not and cannot allow of distinctions in the preparation. They may specify a minimum, but are unable to rightly honor a maximum preparation. That must await the enlightened action of some medical faculty. Before many moons have come and gone some institution of medicine will plant itself upon this platform, and though at first the attendance and revenues may be somewhat diminished, it will in the end prove the most popular step ever taken in our educational history.

May God speed the day, and also grant that it fall to the lot of some Ohio college to lead the van.

We now notice that, as a result of this friendly cooperation between the academic and the professional schools, an increased and ever increasing number of college and university graduates will be drawn into the vocation of medicine.

Certainly if the medical schools should be closed to all persons except those wearing literary degrees as I have suggested, but no less certainly, if through these increased requirements all future disciples of Æsculapius have the importance of a well-rounded culture impressed upon their minds. I have taken the trouble to examine, upon this point, the records of the inststution, with which I am connected.

Out of the first five hundred graduates, thirty, or exactly six per cent, entered upon the medical profession. From the ranks of the next two hundred, nine per cent became physicians. Of the next hundred, twelve per cent; while from a recent class of thirty members no less than eight selected medicine, seven of whom have already entered upon its practice. I hear a like favorable report from other universities in the state.

It would, however, not be safe to conclude that there is a sudden stampede toward the medical profession, or that anyone is attempting to "bear" this market.

The enrollment in the several medical schools of the state, save when affected by the hard times, shows a healthy growth without any spasmodic increase in numbers. For this reason the interest in medical training found in our universities is one of the cheering signs of the times, and one which, if reciprocated by our medical friends, will soon force to speedy solution the question of entrance requirements.

The almost phenomenal success of university graduates, while pursuing medical studies, is having a very marked influence, and in the right direction. The honors and prizes obtained by these graduates of our literary institutions are out of all proportion to their numbers. When, from a single class in an Ohio university, eight young men select the vocation of medicine, and in its prosecution attend five different medical colleges, in four different states; and

when at graduation six of the eight obtain positions as internes in five different hospitals, it is not necessary to advance other arguments. The case is won on its merits.

What is true for this handful would be true for the large army of medical students. A trained and cultured mind creates its own success.

The remaining topics are so closely related that they may be considered together.

I have been paying my attention very freely to the medical colleges of the state, and should be greatly pleased if some one of my professional friends would now retaliate, for the literary institutions of Ohio must be even more vulnerable from a physician's standpoint.

There are universities within the circuit of Ohio where the principles of anatomy, physiology and hygiene form no part of the course of study; others, where the instruction in these branches is of the most elementary character, restricted to a single semester, and to two, or, at the most, three exercises a week. There are other institutions where the instruction, if more satisfactory, is limited to the few students taking special courses. I know of no instance in the state where advanced work in these three branches, or indeed in any one of them, is required of all the students in all the departments.

It is, perhaps, ungracious to criticize the public-school system. Instruction in the sciences of the human body being here voluntary, or, at the most, of very recent introduction, we should be thankful that it is as good as it is. So far as my observation goes, this instruction is chiefly limited to a little memoriter work in osteology. The ability to name and correctly locate the bones of the body is regarded with very great favor, while little or no attention is paid to physiology, and still less, if possible, to hygiene. Important as a knowledge of osteology is in its place, this kind of work bears about the same relation to true instruction that the ability to count up to ten thousand does to an equation of the second degree.

The time has certainly arrived when the principles of personal hygiene and the laws of sanitary science, so far as they have been formulated, should be required factors in our entire educational system. There are to-day probably not less than six thousand young persons in the colleges of the state. Four thousand more are enrolled in the academies, private schools and public institutions. An additional thousand are found in the female colleges and boarding schools. Thus fully eleven thousand of our citizens, mostly between the ages of 15 and 22, are enjoying the advantages of higher education.

There is not a city nor a village, probably not a township, in the state without representatives in this educational army. To-day they are pupils—tomorrow they take their places in society, and wield an influence proportionate to their fitness for the duties of life. There never was, in the entire history of the state, an association of men with a more profound duty resting upon them than devolves upon this association to-day—to so awaken public attention and public thought as to secure wholesome instruction in personal and community hygiene at these hundreds of institutions of learning. Nor does our responsibility end here. There are this very day over five hundred thousand children in the public schools of the state; another quarter of a million have at least a quasi-connection with the system. One-seventh, or, if you count the irregular attendance, one-fifth, of the population of the state is obtaining instruction at public expense.

We (the people) have a right to demand that this instruction shall take such channels and embrace such subjects as shall best subserve public interests. We make no unwarranted claim when we assert that if proper instruction in physiology and in the laws of their own being could be given to the young people of this state, there would be, on the one hand, fewer crimes against sex; on the other, purer homes and nobler lives. If the laws of heredity were as clearly understood in the school and in the family as on the farm, our asylums would have fewer inmates, and insanity would not be increasing as to day. "We live in an age," says a recent writer, "when sanitary science is doing much to effect the preservation of the human race;" but how much more, if its formulated principles could be scattered like autumn leaves upon every man's door-sill.

All this and more, I take it, is the work before this association—all this and more, the work before every educated man and lover of his race. It is a work in which all good citizens of our commonwealth can join hands. There is room then for that spirit of union and co-operation for which I have been pleading. Let us elevate and ennoble education, both general and professional. Let us secure the highest talent and highest preparation for the future devotees of medicine. Let us see to it that our universities, academies and public schools graduate into society young men and young women fitted for the duties which God and the commonwealth impose upon them. Let us spread the laws of sound health and honest living into the most degraded homes of the state, and there will come to this association a charter stronger than if granted by kings, or presidents, or governors—the charter of an approving conscience.

THE LEGAL CONTROL OF MEDICAL PRACTICE BY A STATE EXAMINATION.

BY JOHN B. ROBERTS, M.D.,
PROFESSOR OF ANATOMY AND SURGERY IN THE PHILADELPHIA POLYCLINIC.

Read at the Fourth Stated Meeting of the Medical Jurisprudence Society, October 13, 1884.

It is my intention this evening to briefly review the advantages that would accrue to the public and the medical profession by the enactment of a law placing the control of medical practice in the hands of a state board of examiners. As is known to many of you, a person who desires to practice medicine in Germany must pass a governmental examination. The students study in universities, and take degrees, but such degrees do not confer the right to enter upon practice. The health and lives of the citizens of the empire are believed too valuable to be imper-

iled by the acts of ignorant physicians. Hence, although the universities themselves are under the supervision of the state, the candidate for practice must, in addition to his university examination for a degree, pass a governmental examination for license to follow professional work among the people of his vicinity. He is not a legally qualified practitioner until this is accomplished.

The recklessness with which medical legislation has been neglected in this state will be apparent when I say that the medical schools are under no state or federal supervision whatever. They have entire control of the time and character of studies required from the intending practitioner, examine him upon the same, and confer the medical degree, which is at once accepted by the authorities as evidence of sufficient knowledge and skill to entitle the possessor to practice medicine, surgery and obstetrics in the community. Still further, to encourage wholesale and unrestrained manufacture of physicians, the "doctor manufactories" are, I believe, even exempt from taxation.

Until the year 1881, there existed in this commonwealth no law whatever regulating medical practice. At that time the law to provide for the registration of all practitioners of medicine and surgery was enacted by the general assembly of Pennsylvania. It effected much good, and was a distinct step forward, though it has, among other minor defects, the weakness that the possession of a genuine diploma is taken as evidence of knowledge.

As long as the medical schools of the United States are dependent for prosperity upon the number of fees received from pupils, and as long as examinations by the faculties who receive these fees are the sole test of skill, a diploma, even from the highest grade institution, carries with it little value as a diagnostic proof of professional learning. The old Latin proverb has it: "Caveat emptor," "Let the buyer beware." I say, "Caveat æger," "Let the sick man beware," if he believes that the fact of graduation from a renowned college confers intelligence and skill. The placard, "No reasonable offer declined," usually tells the buyer that inferior quality of goods is to be expected. Would that many colleges had the honesty to display a similar escutcheon over their portals, reading, "No reasonable ignorance rejected."

The step I advocate tonight is the creation of a board of medical examiners, under state jurisdiction, which shall examine all persons desiring to enter upon practice in this state, after January 1, 1886, without regard to when, where or how they obtained medical education. If such an examination by non-interested persons shows the proper qualifications, the candidate is to be furnished with a certificate, and is then registered in the Prothonotary's office as heretofore. Let the medical schools teach, examine and grant degrees as at present; but let no one practice in this state who has not been examined by those who have no interest in passing or rejecting him. In other words, merely substitute for the diploma the certificate of the State Examining Board as the requisite of registration.

The greatest advantage derived from such a law would be the protection of the public health from ignorant physicians. Bear in mind that I refer now, not to Indian medicine men, negro herb doctors and other charlatans, but to ignorant physicians, graduates of recognized and reputable schools of the United States and other countries; such as are duly armed with beautifully engraved diplomas signed by leaders of the profession, and, therefore, more dangerous to the community than a whole tribe of Indian "pow-wow-ers."

The United States government long ago adopted a similar plan of examining candidates for its army and navy medical services; so that at the present time its soldiers and sailors, even in distant territories and seas, have an average benefit of better-educated physicians than citizens of New York, Philadelphia or Boston. An army or navy surgeon receives his education in any school, but he enters the federal service only after an examination by a board who had nothing to do with teaching him, and who have no pecuniary interest in passing ignorant candidates.

A second advantage of the plan advocated is the improvement in registration that would take place. By the present law, persons who were in continuous practice for ten years prior to its enactment were allowed to register without diploma and without examination. Such persons, if any still reside in the state unregistered, or if any new ones come into the state, would, by the new law, be required to show their qualifications for practice by examination. This would be a gain, as it would exclude a certain proportion of uneducated persons.

Section four of the registration law requires persons coming into this state with diplomas from other countries or states, "to lay the same before the faculty of one of the medical colleges or universities of this commonwealth for inspection, and the faculty, being satisfied as to the qualifications of the applicant and the genuineness of the diploma, shall direct the dean of the faculty to endorse the same, after which such person shall be allowed to register." This imposes a considerable amount of work upon the medical schools, who, doubtless, would gladly be excused from this unpaid and uncongenial labor, for to reject the diploma or graduate of a neighboring institution lays the school open to unjust criticism. Moreover, the law does not state that the said colleges should be schools for undergraduates. Some months ago application was made to me, as Secretary of the Philadelphia Polyclinic and College for Graduates in Medicine, for certification of a man's qualifications for registration under this act. Undoubtedly, post-graduate medical schools were not intended by the law, and I declined to act in the matter. Moreover, there are loopholes in the registration law by which punishment for practicing illegally can be escaped. A notable case occurred six or seven months ago in Clearfield county, and is mentioned in an editorial published in the *Polyclinic* for March, 1884.

An exceedingly important result of the establishment of a state examining board in Pennsylvania would be the elevation of the standard of education in the medical colleges of the country. Many citi-

zens and prospective citizens of the Keystone State study in the colleges of New York, Maryland, Ohio, Michigan and other states. As soon as it is known that no one can practice in this wealthy commonwealth unless he passes the state examination, such persons will study in the highest grade schools, and in those whose graduates show the smallest percentage of failure before the Pennsylvania Examining Board. Hence, if our schools are the best equipped and supply the best education, men will not pay their money to the teachers, boarding-house keepers, and merchants of other states, but will attend our own schools, and thus increase the business prosperity of Pennsylvania. The competition of low grade colleges, whether in this or neighboring states, would not then tend to paralyze the efforts of institutions of high educational standard. There would be no longer a premium offered for quick graduation after two years' study and a five minutes' oral examination in each of seven branches.

Another indirect advantage would be this: that students could study in several institutions, and thus gain the benefit of hearing the foremost teachers of various schools, instead of being cognizant with the precepts of but one faculty. The former method of study is certainly the most elevating, as it broadens professional knowledge.

The division of labor resulting from examinations being held by a non-teaching board, having committees in different parts of the state, would make it possible to hold written and manipulative, as well as oral examinations, and thus do better justice to candidates than is possible by an oral examination alone. Again, the examinations not being held all at one time of year, would further accommodate intending practitioners and lessen the labor of the examiners. As it is now, the college faculties, with great inconvenience to themselves, and often with injustice to the pupils, hurry through the examinations of several hundred students in a few days. A gentleman, now dead, who was for years a professor in a large medical school, once told me of a case where a man who failed to pass his examination was actually graduated, because of a clerical error that occurred in the hurry of commencement time. Neither of us knew how many people owed their deaths to that accidental physician. Bright men may have been rejected by similar errors made in hasty examinations. The state board examinations would be conducted leisurely, and, being partly written, would show by the records whether a man was unjustly recorded. He would also have the right to a public appeal from the report of the board, which now he has not. The college examination is, as it should be under the present arrangement, the private business of a private corporation, and therefore sealed from public inspection.

Another advantage which deserves consideration is the power of revoking a man's license to practice, which would be possible if a State Examination Board is instituted. His diploma cannot and could not be taken away, but his certificate of knowledge, character, etc., could be canceled or withdrawn by the board if he was convicted of criminal malpractice or similar crime.

The last reason for advocating the law is cogent; but to my mind deserves little attention, because it is a selfish one, which should influence us much less than those previously discussed. Such an examination would weed out and keep out of the profession those persons who, though ignorant of medical science, accept professional duties and emoluments, and thus increase the difficulty of an educated physician gaining a livelihood. There are, undoubtedly, too many physicians for the needs of the closely settled districts. Fewer doctors, and better ones, would be a boon to most sections of the state. The state examination would effect both objects. The legal profession has, I believe, certain restrictions to indiscriminate admission to the bar. Why should not the medical profession have some similar protection.

Dr. Isaac Ashe speaks of districts in Scotland where sixpenny charges are made by physicians, and says he knows of an English town of 50,000 inhabitants where one shilling charges are made for medical advice. ["Medical Politics," the Carmichael Prize Essay for 1873, p. 33.] He quotes from the *Medical Press and Circular*, of September 11, 1872, p. 216, the following charges adopted by a practitioner of thirty years' experience: "Midwifery, two shillings and sixpence; advice, sixpence; consultations, one shilling." Is there a barrister in England, or an attorney-at-law in Pennsylvania, who accepts such insignificant fees for professional services? Yet the position of the medical profession in Pennsylvania is little better than that mentioned in England. The poor estimate put upon medical service is due to the overcrowded state of the profession and the inferior quality of much medical work, both of which conditions would steadily decrease after the initiation of a state examination.

That the medical profession desires the adoption of a state examining board may be assumed from the recent action of the Philadelphia County Medical Society. At a meeting of the present month, in which this and kindred educational topics were fully discussed by college professors, and practitioners, both general and special, the following resolutions were offered. After postponement for printing and circulation they were adopted:

Resolved, That the Philadelphia County Medical Society believes that the status of the medical profession of this state will be elevated by the establishment of a non-teaching Board of Medical Examiners, whose certificate shall be the only one accepted by the Prothonotary's office for physicians registering after January, 1886.

Resolved, That the other county societies of this state be requested to advocate the establishment of such a board at the next meeting of the State Society, and to discuss the matter, prior to that meeting, with the members of the General Assembly resident in their counties.

Resolved, That the corresponding secretary be directed to transmit a copy of these resolutions to the secretary of each county society, with the request that immediate action be taken, and reported to this society.

Resolved, That a committee be appointed to draft a law creating a State Board of Examiners, for the examination of all persons for license to practice medicine, the said law to be presented at the next meeting of the Medical Society of Pennsylvania by the Philadelphia delegates to that meeting.

Having spoken of the advantageous action of a

state examining board, I must hastily consider the objections that will be raised to its enactment.

It will be said that physicians living outside of this state, but near its border, are often called to attend patients in Pennsylvania. Very well; let them be examined by the Pennsylvania Board, and register in the county of this state nearest their residences. Shall a physician of New Jersey, Maryland, Delaware, New York or Ohio practice continuously in Pennsylvania, without being subjected to the same examination as residents of this state? Certainly not. Those, however, who come into the state as consultants with duly licensed practitioners of this state should, of course, be excused from the state examination. So should dentists who do not practice medicine, whether residents or non-residents of the state. In the same manner midwives, who attend the very poor in cases of confinement, should be exempt from professional examination, though they undoubtedly should be registered and give some evidence of obstetric knowledge.

A physician changing his residence within the state would merely be required to register in his new locality, but would have to pass no second examination. Nor should those now legally registered and practicing be required to pass the state examination.

It will be urged as an objection that there are physicians who desire to practice special systems of medicine, and that such a state examination would exclude these from practice. Not at all. Let the board examine all candidates on anatomy, physiology, pathology, hygiene, surgery, obstetrics, chemistry and materia medica only, omitting theories of medical practice and therapeutics entirely from the schedule.

I have thus advocated, Mr. President and gentlemen, a measure which will, I believe, add to the wealth and prosperity of the State of Pennsylvania, and elevate the profession of medicine, for whatever elevates the latter must increase the former. The wealth of a community is the health and lives of its citizens. Every useful life saved, every illness shortened, adds to the public treasury. The educated physician may do both; the ignorant physician does neither. I pray you to aid in cultivating the one and eradicating the other.

1118 Arch street.

A CASE OF GOITRE WITH OBSTRUCTION---TRACHEOTOMY---SOME OBSERVATIONS ON TRACHEAL TUBES---EXHIBITION OF PATIENT AND MODIFIED TUBES FOR LOW TRACHEOTOMY.

BY D. W. GRAHAM, A.M., M.D.,

PROFESSOR OF SURGERY, WOMAN'S MEDICAL COLLEGE; SURGEON TO THE CENTRAL DISPENSARY; SURGEON TO THE PRESBYTERIAN HOSPITAL.

Read before the Illinois State Medical Society, May, 1884.

I desire to report this case, both because I think it sufficiently interesting and instructive to put on record as a part of the proceedings of this society, and because it affords a good occasion to present the results of some studies and observations on tracheotomy tubes, which results, I venture to hope, may be of some practical service to the profession.

May Parker, 13½ years old, in last December first noticed an enlargement of the thyroid gland. She came under my observation for treatment in February following, since which time she has taken pretty large doses of iodine, most of the time in the form of the compound solution. The gland was soft and symmetrically, but not greatly, enlarged—not essentially different from what you now observe—although it has diminished somewhat in size since the operation. The isthmus was relatively more enlarged than the lobes, extending from the larynx down to the sternum. During the four weeks of treatment before the operation, the goitre did not apparently increase much in size, but there began to be obstruction to respiration, and marked paroxysmal dyspnœa, chiefly at night. In the early morning of the 24th of March, I was hastily called, and found my patient had barely escaped death in one of these paroxysms. The parents, indeed, supposed at one time that she was dead. I learned that these paroxysms had been gradually increasing in severity for several nights preceding, and that she had not been able to sleep recumbent. The voice was stridulous, and there was decided lividity during the height of the paroxysms. There was decided obstruction to both inspiration and expiration, and the usual sinking in of the soft parts of the thoracic walls on inspiration. I was soon convinced that the patient could not safely pass through another night without relief, and decided upon tracheotomy. Drs. A. B. Strong and J. D. Skeer were called in, and fully concurred in the necessity for the operation. In the hope that the obstruction to respiration was largely due to spasm from pressure or irritation of the laryngeal nerves, and in view of the difficulties that were likely to be met with in the low operation, it was decided first to make an opening above the isthmus. I must give credit to Dr. Skeer, however, by stating here that he did not fully endorse this proceeding. The patient being etherized, I made an opening through the crico-thyroid membrane and the cricoid cartilage, an assistant making traction downward on the upper border of the isthmus, which was in the way. A tube was inserted, but the dyspnœa was not relieved. I immediately proceeded to open the trachea below, and in doing so encountered, in an exaggerated degree, a combination of all the difficulties we are ever liable to meet with in this operation. The trachea recedes from the surface as it passes downward, until at the sternal notch it is nearly an inch and a half (Quain) from the surface, normally in the adult; but the distance, of course, was increased by the thickened isthmus in this case.

There was absolutely no space for an opening between the sternum and the isthmus, except as the latter was pulled upward out of the way with a blunt hook. On this account, the external wound could not be increased in length to correspond with its depth. There were large turgid veins crowded together and necessarily embarrassing hæmorrhage, and before the operation was completed enough blood entered the trachea to seriously compromise the patient's chances.

The next difficulty was an unusual one. The trachea was found to collapse, completely flattening from side to side with each inspiratory effort. This unexpected condition materially retarded my efforts to expose and incise the trachea and maintain the opening after it was made, so as finally to get the point of the tube in the incision. The crowning trouble, however, was one of simple physics, best illustrated by trying to put a curved pin through a straight auger hole. The upper or outer end of the tube, in trying to introduce it, would impinge against the anterior surface of the sternum, and thus prevent the inner end from reaching down far enough to enter the trachea. By using some force, and raising the trachea toward the surface, the tube was finally inserted, but with the outer end buried in the wound. Fortunately, my tube had a small, round neck shield, which permitted of this. During all these steps of the operation, the patient's condition was such as to call for the greatest haste for its completion, as respiration was suspended a number of times completely, and it seemed at the time hopelessly. The patient's life hung in a balance for several hours, and it would be tedious to give an account of all the vicissitudes and narrow escapes of the first five or six days succeeding the operation.

The ordinary trachea tube proved to be wholly inadequate for emergencies like this, and indeed I believe it to be unfit for any case where the wound is either very deep or very shallow. I exhausted all resources trying to get a tube of sufficient length and proper curve, but failed. In twenty-four hours, however, it was absolutely necessary to remove the tube first inserted. The swelling, still increasing, had already buried the outer end so deeply that it was becoming a source of danger, and the inner tube could no longer be reinserted after removing it to free it from the accumulation of mucus. To tide over this emergency, I improvised a tube from a No. 12 (English) silver catheter by cutting off the ends at the proper points. This being tied in with tapes, proved an admirable device, so far as the length and curve were concerned; but on account of its small calibre and the rapid accumulations of mucus, it required frequent removal to prevent obstruction.

A device which I found useful, and which became indispensable in aiding the frequent reintroduction of this tube, is worthy of mention. It consisted of a small wire bent on itself in the middle, so that the two extremities were parallel; then curving these to correspond with the inferior surface of the wound, and making a slightly hooked extremity of the loop, which was to be placed in the lower angle of the tracheal wound, the end of the tube was made to glide along the parallel wires. Without some aid of this kind, this provisional tube would have been useless.

As it seemed likely that the patient would need a tube for some time, I set about devising an instrument that would fulfill the requirements of the case. In this I had the valuable assistance of Dr. Strong. The result was the tube which you now see *in situ*, and which the patient has worn for two months with perfect comfort and safety. It is a modification of the tube devised by A. E. Durham, of London, "who has made a very important advance in this department of mechanical surgery."

The distinctive features of the Durham tube are, first, that instead of being curved, it is right-angled with the angle rounded off, the inner or tracheal portion being short, and the outer or horizontal arm long; and, second, the neck plate or shield is made to slide up and down on the tube, and is secured by a binding screw at the point we desire, in adaptation to the variation in the depth of the wound in the same patient, or in different patients. The inner tube is made up of segments jointed together (lobster-tailed), as it must be for any tube which is not a perfect arc.

With it, as found in the shops, there comes also a jointed pilot or obturator to render it more easy of introduction.

Now this instrument would have answered the purpose in my case if it were possible to introduce it, but it is a physical impossibility to insert the Durham tube with its short, inner arm and right angle through a deep, narrow wound. I was not fully convinced of this until I made the effort. And besides the axis of the tracheal portion does not correspond with the axis of the trachea at this point, although it does so, nearly, at all points above this.

The essential modification of the Durham tube, which I have made, is in the shape. The outer or horizontal portion is long and straight, but instead of the angle there is a curve, which, however, is not a perfect arc; but it is the only shape which approximately harmonizes with the anatomical relations of the trachea at this part of the neck, and at the same time makes it possible of introduction. I know that only those who have encountered in some degree the kind of embarrassments this case presented, can fully appreciate the advantages of this modification. To others it may seem unimportant. The only valid objection that has been urged against the Durham tube is that the segments are liable to become detached and pass down the trachea. I had this defect remedied by having the tip of the outer tube made slightly conical, and a slight "swell" above the middle of the lower segment, so that if it should become detached it could not pass through. I have also discarded the metallic, lobster-tailed pilot, and substituted one of soft rubber, made pervious. (See illustration).

I think the advantages are obvious in having the pilot hollow, through which a small amount of air can pass while the instrument is being introduced. I would like to suggest to the instrument makers that all forms of the Durham instrument be made with the rubber pilot, for while there would be nothing lost in efficiency the cost would be materially reduced. I believe the chief reason why this instrument has not come into more general use is because it is relatively expensive. If the instrument makers will adopt the suggestion I have made—to substitute the pervious rubber pilot for the metallic impervious one in this tube—they will do the profession a good service. At least this modification should be adopted so far as to afford a choice between the two.

Messrs. Sharp & Smith, of this city, have adopted these suggestions in these tubes, which I exhibit here.

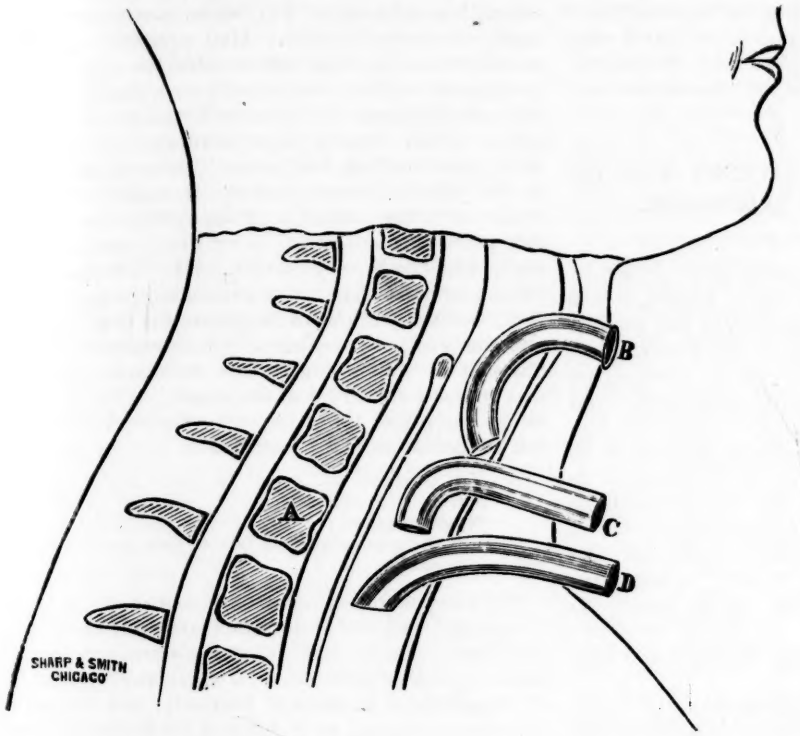

Diagram showing the Increasing Depth of the Trachea from the Surface of the Neck, from above downwards, in the Normal Condition of the parts; and also, the Tubes described in the Paper and their adaptation to the Trachea when *in situ*.

A, body of first dorsal vertebra, the episternal notch on which *D* lies being opposite the middle of the second. *B* illustrates the faulty position which the inner end ot the quarter-circle tube assumes in most casesd *C*, the Durhem tube. *D*, the modified tube describee in the paper for low tracheotomy, especially when thd wound is deep and narrow. *E*, adjustable neck shiel. for *C* and *D*, but recommended for the quarter-circle tube as well, which would make that shape much less objecionable. *F*, jointed inner tube, for *C* and *D*. *G*, a hollow, soft rubber obturator, recommended as a cheap but efficient substitute for the jointed metal obturator of the Durham tube, or any of its modifications, and suitable for tubes of any shape.

The tubes in common use, as all know, are made after the pattern of a quarter of a circle, with almost no variation in length or curve. If the trachea were always of a certain fixed depth from the surface, the quarter-circle tube would approximately fulfill the requirements, and it seems to be devised on the theory that there is no variation in the depth of these wounds. But we know the great variations of depth at different times in the same case, as well as in different patients. When the neck shield is secured against the surface of the neck, as it must be to maintain the tube in position, the inner end in one case would be pushed too far into the trachea. In another case, it would not reach far enough to be secure, being easily dislodged by increase of swelling; while in nearly all cases the opening in the lower end, instead of looking downward, looks more or less toward the anterior tracheal wall so as to be occluded either wholly or in part. These imperfections, which are inherent in any tube with a fixed neck shield, are happily overcome in the Durham instrument, in which the axis of the tracheal portion is straight and corresponds with the axis of the trachea itself; and what is equally important, this inner end is placed where we desire it, and there secured by moving the adjustable neck shield up or down, in adaptation to the thickness of the tissue at the time of its first introduction, or as they vary from day to day.

I think it will be found, therefore, by all who have to do with tracheotomy tubes, that the Durham instrument, with some of its modifications, is the best yet devised, and the only one constructed on correct principles.

It is a pertinent and practical question why a goitre of this size should interfere with respiration; for, as compared with the average goitre which we meet with in practice, this is not a large one. The rule is, even in those cases in which the gland is enormously enlarged, that there is no obstruction to respiration. So that size, as such, is not a factor in causing compression of the air tube ordinarily. We know as a clinical fact that in acute goitre, where a considerable increase in the gland takes place in a few days, there is generally more or less dyspnœa. But in this patient the gland had been gradually increasing in size for a period of four months before there was any noticeable dyspnœa. I recall that when I was a medical student, Prof. Frank H. Hamilton related in one of his lectures to the class the particulars of a case of threatened suffocation from goitre, in which a post-mortem examination showed that a part of the isthmus was behind the trachea, which was compressed between the two portions. An account of this case is given in Hamilton's Principles and Practice of Surgery. Some works on anatomy I find allude to this anomaly, and there have been found a few cases where the entire isthmus was placed behind the trachea. I think it

probable that it is in some such anomalous disposition of thyroid tissue that we will find the explanation of the obstruction in this case, and in all those cases where neither the rapidity nor the size of the enlargement is sufficient to account for the conditions.

PNEUMONIA IN HIGH ALTITUDES, AND ITS TREATMENT WITH JABORANDI.

BY J. W. BROWN, M.D.

The greater prevalence of pneumonia in proportion to the population, and its much higher rate of mortality in mountain attitudes, than at the average elevation of the earth's surface, set the writer, about six years ago, to seek about for a plan of therapeutics of greater efficiency than that generally practiced and approved. About that time jaborandi came into use, and there were notices in the medical journals of its efficacy in the treatment of dropsies by virtue of its peculiarly powerful influence on the sudoriparous glands. Its wonderful diaphoretic power pointed it out to the writer as being possibly a useful agent in the treatment of pneumonia in its early or formative stage, with the object in view that by its means an abortion of the disease might be effected by limiting the effusion, and thus averting the perils of a fully developed pneumonia.

An immediate trial of the drug seemed to confirm the supposition, and an invariable use of it for the last five years in the formative stage of pneumonia has been productive of such extraordinarily beneficial results, apparently, that the writer is induced to present the experience and the method to the attention of the medical profession, asking their indulgence to the extent of first putting the method to a fair trial and then approving or condemning as the results may warrant.

There is nothing of originality claimed in this practice by the writer, for he is fully conscious that the result of the action of the drug is identical with the result of the action of the steam-bath or sweat-bath practiced by Thompson and others with the same end in view—the abortion of pneumonia in its formative stage. This resort to an almost obsolete method has been the outcome of necessity in an endeavor to obviate the almost certain death that follows upon a fully developed pneumonia in the altitude of the writer's practice, viz: An elevation ranging from eight to twelve thousand feet above the level of the sea, in the San Juan mountains. An exceedingly high rate of morality, and a greater prevalence of the disorder in proportion to the population than at lower levels, accords, we believe, with the experience of every practitioner of medicine in the mountain altitudes, and a firm conviction of the efficiency of this method as a result of five years' experience with it has led the writer to lay this report before the medical profession, sincerely believing that its general adoption will materially diminish the mortality resulting from simple pneumonia, whether occurring in mountain altitudes or at the level of the sea.

We give a few illustrative cases:

CASE NO. 1. Mrs. S., aged 30, merchant's wife. Had had pneumonia, according to her own account, several times before at Del Norte, about seven thousand feet above sea-level. Had probably had pneumonia before, because she detailed the symptoms of pneumonia of her own accord, viz: A chill, with a sense of shortness of breath, followed by pain in the chest, cough, bloody expectoration, fever, prostration, and three or four weeks' sickness, she being at the point of death part of the time, and all the while under the care of a regular practitioner. About five years ago was called to see her; found her in a rigor which was very marked. Her face was cyanosed, extremities cold, she was shaking from head to foot, and her teeth were chattering as though she had an ague, and she complained of a shortness of breath. She said: "I am going to have pneumonia, I recognize it and I am afraid of the result." She was then living 9,400 feet above the sea. Ordered her put to bed immediately and prescribed:

℞ Ext. jaborandi fl.....℥iv.
Spts. ammon. aromat.....♏40.
Syrupi simplicis.....℥iv.
M. S. One teaspoonful every two or three hours to induce profuse perspiration.

She was put to bed, covered heavily with blankets, surrounded with hot irons wrapped in wet cloths, the irons being placed close to her body and the mixture administered as directed. In about twenty minutes she commenced to perspire profusely, and the sweating was maintained at its highest pitch for about six hours. Her bedding and clothing were then changed, her body wiped dry and fifteen drops of the mixture were administered sufficiently often during the night to keep her skin moist. The next morning she got up at her usual time and resumed her household duties. During the day she expectorated a small quantity of pneumonic sputum and complained of a slight feeling of soreness in the lower lobe of the right lung, but recovery was almost immediate. She did not go to bed again on account of this sickness and she had no further medication on that account.

CASE NO. 2. J. B., a miner, aged 54. Lived in a miner's cabin about four miles out of town, and at an elevation of about 10,000 feet. On inquiry found that he had the symptoms of commencing pneumonia. Prescribed the mixture of the above prescription, and gave directions as in the preceding case. The next day the brother reported the patient better in some respects but worse in others. He said the patient had retention of urine. Went up to see him and found him on his knees in bed vainly trying to void his urine into a tin cup. Introduced a catheter and found the bladder almost completely empty. Ordered cold water to be drank in plentiful quantity, the patient having abstained from drinking water for fear of aggravating the supposed retention of urine. He expectorated pneumonic sputa for two or three days, but within a week he resumed his work. In this case the sweating was so extreme that the skin had temporarily almost entirely usurped the function of the kidneys in the elimination of water, and the small quantity of urine in the bladder—a few drops only—was very acrid and irritating. The kidneys resumed their function in a few hours.

CASE No. 3. J. K., aged 24, a miner. Lived at Ophir, thirteen miles away, across a mountain range, and at an elevation of 10,000 feet. He was taken with a chill at four o'clock in the morning. I arrived at his bedside at half-past four o'clock in the afternoon, so that the disease had a start of twelve hours and a half. From description given by messenger, a diagnosis of pneumonia was made out. The patient was in bed. Face was dull and leaden in color; he had fever, cough, pain in the right lung, and a sense of shortness of breath, and the floor near the head of the bed was covered with bloody expectoration. The floor was spattered with pneumonic sputa all over an area three or four feet in extent in all directions. Physical examination showed a dullness in the lower part of right lung, with subcrepitant râles. This was a case of plastic pneumonia beyond the shadow of a doubt, and it had a start of twelve and a half hours. He was treated in the same manner as the two preceding cases. In a quarter of an hour beads of sweat stood out on his forehead, and the patient was informed of the certainty of a speedy recovery.

As the sweating progressed, he experienced proportionate relief. The sweating was continued at the highest pitch for nearly eight hours. Ordered a diminished dose of the mixture, continued for two or three days, gave general directions for his further management, and dismissed him with orders to report if necessary. In a week he resumed his work, having made a complete recovery.

CASE No. 4. J. C., saloonkeeper, age 24. Had had pneumonia two years previously at Leadville, and was confined to his bed three weeks, being very dangerously ill, according to his own statement, most of the time. He spoke very flatteringly of the physician in charge, on account of the good care rendered, and expressed himself as very lucky that he finally recovered, the prevalence of the disease and the rate of mortality being exceedingly great at that time at Leadville. Was called to see him on a Sunday afternoon, at half-past three. He had been taken with a chill at seven o'clock in the morning of the same day, so that the disease had a start of eight hours and a half. His pulse was full and bounding, expectoration profuse and typically pneumonic; there were fever, a dull, leaden face, pain in the right lung, cough, and a sense of a want of breath. Examination gave the physical signs of pneumonia. He said it was the same thing he had at Leadville. He was treated in the same way as the preceding cases, with the same exceedingly profuse diaphoresis as a result, and the same relief. He remained in bed till the following Thursday morning, when he got up at the usual time and resumed his regular occupation. He was dismissed on Thursday morning without further treatment, and two days after was apparently well. Other cases may be given, and some who have walked the street within two days expectorating pneumonic sputa, after being subjected to the jaborandi sweat-bath ordeal, without relapse or further inconvenience, convalescence continuing to perfect recovery in a few days thereafter.

These cases are but examples of the usual behavior of pneumonia treated by the jaborandi method, in the formative stage, so far as the experience of the writer goes, during the last five years; so that he feels compelled to advocate a more general trial of the method, having had two cases only of death from this disease in five years, one being a case of neglected pneumonia, which had developed to the involvement of two-thirds of the right lung in pneumonic solidification, death taking place suddenly on the day after the first visit and apparently from heart-clot; the second case being that of an old man whose constitution was already shattered with hard drinking, and in whom the disease, if it were pneumonia, developed insidiously and resembled as much a hæmorrhage as pneumonia, symptoms were so anomalous.

In the practice of the writer, he feels that pneumonia has lost its terrors even in these high mountain altitudes, whereas before this practice the mortality was great and the doctor overwhelmed with a sense of helplessness. A case of simple pneumonia that would recover without any care, other than that of simple hygienic management, at sea-level, seemed, in these altitudes, to be almost necessarily fatal, and recovery from double pneumonia an impossibility. The only safe way in mountain altitudes is to abort the disease early, before the advent of symptoms indicating asthenia, and this can be done at any time previous to the appearance of asthenic symptoms by the simple method detailed herein; that is to say, limitatioin the extent of the solidification may at any time be effected before symptoms of asthenia make their appearance, so that as small a portion of a lung as possible may be rendered useless by solidification.

The excessive mortality in pneumonia at mountain altitudes, over that at the average level of the earth's surface, seems to be due to the rarefied condition of the atmosphere mainly, its chemical composition being the same as everywhere else in open country, as shown by chemical analysis of three specimens, one of which only showed a trace of ozone.

Exhaustion seems to take more rapidly on this account, due probably to a deprivation of oxygen. At 10,000 feet, a volume of air of sea-level density expands into about one and one-half volumes, so that a man in health needs to breathe a quantity of air greater in volume by one half in order that the tissues of the body at large may be supplied with the requisite quantity of oxygen. Hence, probably, the greater gravity in mountain altitudes in case in which a considerable portion of a lung becomes solidified. In an inflammation of lung tissue there seems, also, to be a greater rapidity in the spread of the inflammatory process to adjacent lung tissue, probably owing to increased functionation, and hence the necessity of a more active treatment to stay the inflammatory process and effect resolution. That a pneumonia may be aborted the writer has no doubt, judging from these results, however crude the experiments may be, and that the duration of the disease is in ratio with the extent of the solidification, and inversely; also that the extent of the solidification bears a relationship to the time elapsing between the initiatory chill and the establishment of a thorough derivation by profuse diaphoresis.

It would seem, also, that the pathological condition is a simple inflammation independent of zymotic influence, as the remedial agent in its action is purely physiological; a derivative influence only being exerted from the lung tissue to the cells of the sudoriparous glands,—otherwise, on the cessation of the physiological action of the drug, the zymotic influence still persisting, the pathological process ought again to be awakened.

The method described is inapplicable after the appearance of asthenic symptoms, because the mischief sought to be averted is already in existence and is the cause of the asthenia, viz.: a fully developed pneumonic solidification. If it is now too late, the only resort remaining is the method of support and hope, both together, in these mountain heights at least, being inadequate to the making of a lung largely hepatized to breathe a sufficiency of oxygen for the needs of the economy, when in its full capacity this is about all that it can do.

The writer has taken advantage of the sudorific power of jaborandi in the treatment of other inflammatory affections, and notably in the treatment of quinzy and bronchitis, and with results similar to those obtained in the treatment of pneumonia. But in all instances it is a remedy only in the formative stage.

SILVERTON, COL., Feb. 14, 1885.

MEDICAL PROGRESS.

OBSTETRICS AND GYNÆCOLOGY.

LOCAL TEMPERATURE OF THE BREAST AFTER DELIVERY.—M. Chatelet (*Paris Médical*) has studied the local temperature of the breast at the time of the secretion of milk, and finds that it results in an elevation of temperature to the extent of two or even three degrees; that there exists an evident relationship between the temperature of the breast and the secretion of milk, the temperature rising as the secretion becomes more abundant; that, on the second or third day after delivery, the local temperature of the breast reaches and passes 36° C., and that if it remains at that register for the first eight or nine days of lactation the milk is sure to be abundant; that the secretion of milk will be but slight if the temperature remains below 36°, or does not retain that register; that the secretion of the milk has no influence on the general temperature, and that milk-fever does not exist; and finally, that the general temperature has a marked influence on the local temperature of the breasts.

TRAUMATIC TUBERCULAR PLEURITIS.—Prof. von Bamberger (*Wiener medizinische Wochenschrift, Med. Times*) gives the case of a man, aged 43, a confirmed drinker, who was struck on the left side of the thorax by a wheel. Pain, cough, and other symptoms of pleuritis rapidly showed themselves. The patient, in whom no inheritance of tubercle could be traced, presented when first examined all the physical signs of left-side pleuritic effusion. The sputa and blood were carefully examined, but no trace of bacilli could be discovered. The case progressed unfavorably throughout, and fever, cough, and dyspnœa became daily worse. Thoracentesis was delayed by the patient's obstinacy, till a month's illness had materially depressed his strength and Cheyne-Stokes respiration had set in. The operation gave but little relief, and death ensued from œdema of the lungs. The autopsy performed by Professor Kundrat proved the existence of extensive diffusion into the left pleural cavity, the walls of which were lined by a thick false membrane studded with nodules of tubercles of the size of millet seeds. The left lung was completely compressed, but no tubercles could be discovered within it, nor were they to be found in any of the other organs of the body. By the microscope the nodules in the thickened pleura were found to contain numerous bacilli, indistinguishable in form and character from those described by Koch, but similar investigation of the pulmonary and other tissues of the body failed to discover a trace of them elsewhere. If it be admitted that the bacilli in such a case as this form the determining cause of the disease, it only remains to be decided how the bacilli obtained access to the affected part. One theory propagated by Baumgartner suggests the possibility that a real physical inheritance of the virus has taken place, and that the poison lies dormant in the body until favorable conditions for its development present themselves. Another view, perhaps more easy of acceptance, regards the general circulation as the natural channel for the distribution of the bacilli, and the white corpuscles as the bearers of them. An apparently primary tubercular affection such as this case exemplifies is occasionally to be noted in the long bones, in which also the presence of bacilli has been more easily demonstrated than explained.

MEDICINE.

ON GUMMATA OF THE SKIN.—According to Balzar (*Revue de Médicine, Jour. de Médicine*) the specific character of the products of inflammation is not distinguishable by the anatomical form; the differences in these forms occur, on the contrary, in their modes of evolution.

The process of evolution of the gummata comprises three stages:

1. Inflammatory stage: formation of primitive gummous nodules about the vessels (period of crudeness of the gummata); elongated cylinders composed of embryonic cells more or less developed (lymphoid or epitheloid elements) envelop the vessels, they result from an inflammation of the vascular walls. The vessels are still permeable. At this time the lesion is still curable;

2. Stage of degeneration: vascular obliteration, necrosis with consecutive coagulation, granular degeneration, formation of a caseous deposit. The degeneration commences at the periphery of the nodules and follows the contiguous vessel in a centripetal course. The degeneration is in part of a fatty nature, and partly of an indefinable nature (granulations that are insoluble in ether, and not colored by osmic acid). In the caseous masses the presence of elastic granules indicates the destruction of elastic

fibres, and they are detected by picric acid, but they soon lose their micro-chemical characteristics and are confounded with the other granulations;

3. The evolution terminates in two different ways: (*a.*) encysting of the caseous deposit, which is enveloped by a sclerous zone, increasing until the disappearance of the deposit by absorption; (*b*) extensive advance of the degeneration, destruction of the epidermis, ulceration and progressive elimination of the gummous deposit.

Icterus Produced in the Course of a Few Hours by Nervous Irritation.—Dr. H. Rendu (*France Médicale, Jour. de Med. et de Chir.*) relates the case of a woman 25 years of age, who had been treated in his hospital service for puerperal peritonitis. During her convalescence, while her general condition appeared to be good, she was affected with retention of urine. The student who attempted to use the catheter made several ineffectual efforts, but was obliged to desist on account of a sort of nervous crisis which his manipulations produced. Three-quarters of an hour later, when he returned to the ward, he was astonished at seeing his patient manifestly jaundiced (she had a very clear skin previously). As he was about to attempt catheterism again the patient, still very nervous, urinated spontaneously—the urine being of a deep brown color, and evidently containing biliary pigment. This occurred at 11:30 A.M. At 1 P.M. the yellow color was marked not only in the conjunctivæ, but also all over the skin, being most pronounced on the abdomen and trunk, and a little less so on the extremities.

On the following day the jaundiced appearance was as decided as during the most intense and prolonged cases of hepatic colic. The urine looked like brown beer, and gave a green color on the addition of nitric acid. The stools were of the greyish, clayey character, as when deprived of bile. The pulse was normal—no prurigo, no nervous trouble, no hæmorrhagic tendency, tongue clear, marked thirst, no want of appetite; ate but little; no pain over nor enlargement of liver; no abnormal sensibility at the epigastrium.

For two days the icterus retained its maximum of intensity. The third day it commenced to decline, and the stools took on a little color, the urine remaining dark. The fourth day gave no trace of the jaundice externally, only the urine was a little dark in color and responded to the nitric acid test. On the fifth day there was no evidence whatever of the recurrence of jaundice.

Osmic Acid in Sciatica.—Mr. James Mercer reports in the *Lancet* the results of his practice with this drug in eighteen cases, treated at the Bath Mineral Water Hospital. He claims that only about twenty-five per cent. remain of the cases admitted as not benefited by the waters; and it is to this twenty-five per cent. that he applies this treatment. The patients' ages varied from eighteen to sixty-five. In twelve cases he succeeded in giving them absolute relief for a period of three weeks. The number of injections varied from one to four. In six he gave temporary relief. The injections were as many as twelve in one case, and they obtained more comfort by its use than even by hypodermic injections of morphia. He used a one per cent. solution, injecting deeply over the sciatic nerve, at a point midway between the tuber ischii and trochanter major, three to five minims of the solution. It produced no constitutional effects, but locally at the seat of puncture the patient invariably complained of a numb feeling, which, however, was transient. In some cases the effect was marvellous, the patient being able after a short time to stand on the affected side, which he had been unable to do for years.

On the Elimination of Phosphoric Acid by the Urine in Mental Diseases.—M. A. Lailler (*Annales des Maladies des Organes Génito-Urinaires*) gives the following as the result of his researches:

1. In acute delirium and in acute mania, phosphoric acid and urea are eliminated in notable excess.

2. In mania with excitement, phosphoric acid is eliminated in slight excess; that of urea is normal.

3. In simple mania the urine is physiologically normal.

4. In melancholia in the acute stage or with excitation, there is a notable increase in the elimination of urea, and a slight increase in the elimination of phosphoric acid.

5. In melancholia without excitation, there is no increase over the physiological quantity of phosphoric acid eliminated in urea.

6. In general paralysis, the excretion of phosphoric acid and of urea is in close relation to the multiple morbid conditions characteristic of that disease.

7. In epilepsy the urine at the time of the crises, or immediately afterwards, contained a markedly increased proportion of phosphoric acid, and a moderately increased proportion of urea; when the attacks succeed each other rapidly there is an exaggerated amount of both phosphoric acid and urea; in the intervals of the attacks the urine is normal.

Auscultation of the Œsophagus in Deglutition and in Pathological Conditions.—A. Baretz (*Revue de Médecine, Jour. de Méd.*) considers that:

In the normal state, the sounds of deglutition are perceptible by auscultation in the interscapular region, and seem to be a little more intense to the left than to the right of the vertebral column.

In certain pathological conditions the intensity of the sounds of deglutition seems to extend in a greater degree to one side or the other of the vertebral column. Among these pathological conditions the most noteworthy were: First, the tuberculous induration of the apex of the lungs. Second, the tracheo-bronchial ganglionic engorgement. In these cases the intensity of the sounds of deglutition is most pronounced on the side where the lesion exists or predominates.

At other times the modification influences not only the intensity, but also the quality of the sounds of deglutition. Thus, in a case of pleuritic effusion, the sounds of deglutition on the corresponding side partake of the quality of the pleuritic souffle.

Baretz considers that the study of the sounds of deglutition as now applied to the diagnosis of the seat of a lesion of the œsophagus (narrowing, for example) might also be applied in certain cases in determining the exact seat of a pulmonary lesion.

THE DIAPHORETIC TREATMENT OF PUERPERAL ECLAMPSIA BY MEANS OF HOT BATHS.—Brens (*Archiv. f. Gynäk., Edin. Med. J.*), has now reported two sets of cases placed under this treatment. The first set included six cases, with five recoveries and one death; the second set includes eleven cases with one death. The treatment consisted in placing the patient in a bath (38° C.), raising the temperature gradually, then wrapping her in blankets, thus securing profuse diaphoresis. Of the eleven cases four had convulsions at the beginning of labor, two during the first stage, one during delivery, and four after. In the majority of cases the eclamptic seizures were severe. In the fatal case the issue was more probably dependent on peritonitis, possibly septic, than on the convulsions. The two series together, then, afford a total of seventeen cases, with but two deaths—one of these latter not from convulsions. In eclamptic seizures the danger to life depends only indirectly on the convulsions. The main danger lies in the altered characteristic of the blood—hydræmia—and the consequent albuminuria and anasarea. These accompaniments of Bright's can obviously best be met by profuse diaphoresis, a treatment which, while it can have little effect toward curing the kidney trouble, undoubtedly relieves the symptoms which are threatening the life of the sufferer. From the use of this hot-bath treatment Brens has seen nothing but good effects. It is not apt to cause either abortion, or premature labor, or hæmorrhage; on the contrary, he would advise the use of hot baths at any time of pregnancy when the appearance of albumen in the urine and coexisting œdema causes apprehension of ill; indeed, they are indicated as a prophylactic measure. A striking case is recorded, where a patient, æt. 26, in her first pregnancy, highly dropsical, with a large percentage of albumen in the urine, was subjected to the hot-bath treatment at the eighth month, went to term, was delivered of a child weighing 2,700 gm., received during this interval forty-five baths with positive good effects, both as concerned her own condition, the continuation of the pregnancy, and the safety of the child. This treatment answers when eclampsia exists, and also in those cases where the occurrence of the eclampsia may be apprehended.

TREATMENT OF EARACHE.—M. Moure (*Jour. de Méd. de Bordeaux, Jour. de Méd. et de Chir.*) uses habitually a combination of atropia with morphia to quiet the pains of earache; giving relief to otalgia and to cases of subacute otitis of the tympanum and of the Eustachian tube, particularly in children. He prefers a solution of morphia to instillations of oil, laudanum and ether, these substances having the effect of producing a traumatic meningitis and sometimes graver lesions. He prescribes: Sulphate of atropia, 2 to 5 centigrammes; chlorhydrate of morphia, 5 centigrammes; neutral glycerine, 15 grammes, on cotton wool at the external auditory meatus, and, when necessary, a drop or two by instillation night and morning into the auditory canal. This will relieve external otitis and furunculous otitis.

DISEASE FROM BICHROMATE OF POTASSA.—Dr. B. W. Richardson, in *The Asclepiad*, gives a plate showing the diseased influence of this drug upon the hands in an admirable manner, and gives an account of its mode of action. It seems that in transferring the neutral chromate of potassa by means of acid into the bichromate, the vapor arising carries with it an infinite number of pulverized particles of the bichromate, which, inspired in abundance, give to the palate a bitter and very disagreeable taste. If the respiration be made by the nose the particles are dissolved in the secretion of the membrane of the septum of the nose, creating a violent pricking, suffusion of tears, and irresistible sneezing. In time, the membrane begins to be thrown off, and portions of it are carried into the handkerchief used in blowing the nose. This process goes on so rapidly that after a period of six or eight days the septum becomes thin, is permeated with openings, and is ultimately detached altogether. At this point all the symptoms cease, and the workman scarcely notices the loss of the nasal partition. This process of ulceration does not occur in those who take snuff. In these, owing to the layer of powdered tobacco which covers the membrane, and the frequent use of the handkerchief, the evil is removed, or rather prevented. It is the cartilaginous portion of the structure that is specially attacked.

On the skin, in its normal state, the epidermis being intact, the bichromate exerts no baneful influence; the hand may be plunged into a concentrated and hot solution of the salt, and remain covered with it for an entire day without effect; but if the skin is torn or abraded, a sharp pain is felt, the cutaneous tissue is decomposed, and violent inflammation is established. These symptoms are accompanied with intense pain, especially in winter, when the cold is severe. The action of the salt does not cease until the cauterization has penetrated to the bone. Internally, in a small dose, a few centigrammes, the bichromate acts as a purgative; in larger doses, say of one gramme, it acts as a poison. In the large doses it produces colic and purging, but no vomiting. In one manufactory certain of the workmen placed some bichromate of potassa in a barrel of cider as a joke. All who drank of it were affected with severe colic and diarrhœa.

Dr. Richardson gives five cases of workmen in business where the bichromate is used, and as a weak watery solution of five to six per cent. of the salt; where the hands and forearms were the parts most affected and as if affected with acute eczema. The symptoms as described by a sufferer are as follows: "The first symptoms of local poisoning are heat, itching, and tingling upon the ends and middle joints of the fingers, which, when examined, are found to be covered with minute, irregular red patches, upon which are numerous small elevations

clustered together. In the course of a day or so these enlarge to the size of a small bead, and are filled with a limpid fluid. In a short time these clusters run into each other, forming large blisters, which dry and crack open, causing the most acute pain and itching. At this stage pustules begin to form over the body, mainly down the spine, on the neck, left side, arms and ankles, accompanied with considerable constitutional affection, such as sickness, headache, thirst, fever, sleeplessness, and loss of appetite." The eruption did not always partake of the character of eczema, but in one case bore a close resemblance to pitzriaris rubra.

As to treatment, the application, while exposed, of a wet sponge before the nostrils appeared to be advantageous. When the skin was abraded, and the chromate had produced ulceration, it was the best treatment to wash thoroughly with a feeble alkaline water; then, if inflammatory action followed, to poultice, and afterward to apply freely sub-acetate of lead in solution. Abstinence from beer, spirits, coffee, potatoes, brown meats, salt fish, sugar, and tobacco. One drachm of liquor potassa in a cupful of barley-water thrice daily, before meals, for five or six days; after which three times daily of tr. serpentaria one drachm, with five drops of laudanum. When the patches begin to heal, resin ointment locally, and a mixture of ammonio-citrate of iron, with iodide of potassium and bromide of ammonium in solution with camphor water. Washing the hands in ammonia does no good; a solution of bichromate, rendered perfectly alkaline with ammonia, poisons quicker than an acid or neutral solution. Dr. Richardson recommends the wearing of a mask and impermeable gloves while at work.

His theory of the mode of action of this agent is, that it acts upon the gelatinous structures of the body. It changes their molecular condition, and renders them insoluble. That leads to an arrest in the living dialysis and in the transudation of fluid. The arrest leads, in turn, to perversion of function, to congestion, and to all the subsequent phenomena.

Morphia in the Urine of a Morphine Habitue. —Dr. B. W. Richardson, in his *Asclepiad*, gives the case of a man, aged 47 years, tall, plethoric and ruddy, who has been addicted to morphia-taking for the past ten years. When first seen he was taking thirty-eight grains daily. Twelve ounces of fresh urine, after the injestion of thirty-six grains, yielded morphine equivalent to 1.2 grains of morphia acetas. The morphine was satisfactorily identified by Mr. A. Winter-Blyth, turned into the crystalline hydriodate, and gave the usual reaction with iodic acid. A few days later, after the injestion of twenty-one grains, the urine yielded the equivalent of one grain of the salt. Still later, the quantity injected being reduced to six and a half grains, the urine yielded 0.18 grain of the salt.

A Simple Disinfecting Lamp.—Take an earthenware or metal lamp, fit it up with the cotton wick in the usual way, and then charge it with a mixture of equal parts of common benzoline and of carbon bisulphide. The lamp so formed is lighted in the usual way, and gives off when burning free quantities of sulphurous acid. The object of adding the benzoline is to give steadiness to the liquid during the process of burning.—*Dr. B. W. Richardson in his Asclepiad.*

SURGERY.

Effect Produced by the Introduction of a Bed-bug into the Ear. — Dr. Grand (*La Loire Médicale, Paris Médical*) gives the case of a patient who was awakened at night by an intense pain in the left ear. She felt something running at the same time in the auditory canal, and supposed that some insect had entered there. She filled her ear immediately with warm water, and in about half an hour the pain was lessened, and the movements which were felt ceased entirely. However, a dull pain with deafness remained; accordingly, on the following day, by the advice of a friend, she dropped several drops of the essence of peppermint into the ear. Immediately there followed an intolerable pain which lasted two hours. When seen by the doctor on the third day, she complained of frequent severe lancinating pains in the ear, of deafness and of noises. The watch could not be heard to tick when applied against the affected ear, while on the sound side it could be heard at a distance of forty centimetres. On illuminating the interior of the auditory canal, a dead bedbug was seen distinctly upon the tympanum, and a slight injection of warm water dislodged it. The tympanum was markedly red and thickened throughout its extent. It was impossible to examine it in detail, except attachment of the external apophysis of the malleus. It seemed to be slightly more concave than is normal. There was then an acute myringitis produced both by the essence of peppermint injection and by the presence of the bed-bug. There are several observations on record where bed-bugs have passed into the ear and produced acute pain by sucking the blood from the membrane of the tympanum. This pain is infinitely more violent than that produced by the movements of the feet of other insects. The inflammation of the tympanum was relieved in eight or ten days, the hearing returning to its normal condition. The treatment consisted in the use of insufflations by Politzer's bag, and slight applications to the tympanum of boracic acid and vaseline.

A Perineal Calculus.—Dr. Sarget de Orihuela records (*Union de las Ciencias Medicas, Gaz. hébd. des Sciences Méd.*) the case of a laborer who suffered for two years from a tumefaction in the perineal region, which was the cause of sharp pains. The patient attributed his difficulty in urinating to the pressure exerted by the tumor upon the urethral canal. Several diagnoses had been made, one of a tumor of the prostate, a malignant tumor, and of a phlegmon. Direct examination showed an extensive induration from the base of the scrotum to the anterior segment of the anus, of an almost cartilaginous consistency, and the slightest touch produced acute pain. Urination was drop by drop and very painful. A local application of strong iodine ointment produced increased pain, an increase in the

size of the tumor, and resulted in the formation of a point of fluctuation. Puncture discharged a large quantity of pus and allowed the passage of the index finger, which encountered a hard, rough foreign body implanted in the peri-urethral tissue; this was removed with the forceps in three fragments, after which the wound cicatrized, but not very firmly, but urination became easy, and the general health was reëstablished.

As a cause for this deposit it seems that the patient had at one time received a contusion in the perineal region, resulting in the retention of urine for thirty-six hours. For fifteen days afterward he suffered from acute pains in that region, which gradually disappeared. The calculus was formed mostly of phosphates, of carbonate of lime and organic matters. There were also traces of urate of lime.

CONTUSION AND LACERATION OF THE KIDNEY; RECOVERY.—Dr. Gelly (*Revue Médicale de l'Est., Annales des Maladies des Organes Génito-Urinaires*) describes the case of a man, sixty-two years of age, who was injured by the wheel of a passing carriage; he sustained a fracture of the twelfth rib on the right side, and at the same time the urine was colored by hæmaturia. This hæmaturia persisted for five days and then disappeared, to return on the twelfth day in consequence of the getting up and violent sneezing of the patient. There was then very acute pain, which was, however, but momentary, and felt in the right renal region. The blood was discharged in much greater abundance than at the time of the accident. This time the hæmaturia persisted for nine days and then disappeared. Eight days later there was retention of urine with persistent straining, which finally yielded to the violent efforts of the patient, and there was an evacuation of a notable quantity of blood which was almost pure, mingled with voluminous clots, and nearly filling a third part of a chamber pot. The bladder, which had formed a hard ball in the hypogastric region, became normal and the patient was relieved. The hæmaturia diminished rapidly and ceased definitely three days later. For some time the patient was kept under the influence of ergot, of injections of ergotine in the renal region, and the sulphuric acid mixture (eau de Rabel), which latter was freely used at first.

A month after the last hæmorrhage there was no longer any blood in the urine, nor was any albumen present. M. Gelly has no doubt but that this was a case of laceration of the kidney. He considers the wound of the kidney, while in course of cicatrization, to have been opened the first time from a mechanical cause, and a second time without any appreciable cause. It did not definitely cicatrize except by delayed union and a new generation of the lacerated surfaces. The precise seat of the laceration remains hypothetical. The absence of all tumefaction would indicate a perinephritic discharge, and the laceration probably had its seat near the hilum, directing the blood into the calices and pelvis of the kidney.

COCAINE IN RECTAL SURGERY.—The *Lancet* gives us a reference to the case reported by Dr. Bettelheim, of Vienna, of a man aged seventy-four, who had well-marked anginal attacks, the result of atheroma of the aorta and ossification of the coronary arteries. For some time he had, in addition, complained of rectal and vesical tenesmus. Percussion over the bladder showed that it was not dilated, and rectal examination demonstrated the fact that the prostate was much enlarged, and probably the cause of the trouble. Cacao butter suppositories were ordered, each containing half a grain of muriate of cocaine. One of these was inserted into the rectum at bedtime, and the patient slept well and was not troubled during the night. The beneficial effects were apparent the whole of the following day. The suppository was not given that evening, and the patient passed an uncomfortable, restless night. The next day another suppository was ordered, and acted as well as the first.

INJECTIONS OF QUININE IN URETHRITIS.—M. Girerd (*Jour. de Méd. et de Chir.*) uses the following with success in paludian urethritis:

Chlorhydrate of quinine....	...2 to 4 grammes.
Distilled water.....	300 grammes.
Glycerine	50 grammes.

This injection, repeated three or four times daily, has always arrested the most rebellious discharge.

Weirs (*Gaz. hebdomadaire*) uses in true blennorrhagia:

Sulphate of quinine	1 gramme.
Water	75 grammes.
Glycerine.....	25 grammes.
Eau de Rabel (acids sulph. alcoholisatum, q. s.	

Three injections a day of about five grammes. Great care must be taken not to interrupt the use of the injections until the discharge has ceased, as, in that case, relapses are frequent.

EXFOLIATION OF THE COCHLEA WITHOUT CAUSING DEAFNESS.—The Vienna correspondent of the *Lancet* describes a case under the care of Professor Gruber, a lad aged fourteen, who had been ailing for four years, suffering from an old otorrhœa, with polypus of the left ear. As the patient experienced great pain, and as paralysis of the left nervus facialis existed, Professor Gruber had no hesitation in entirely removing the polypus, and in so doing came upon the cochlea in a state of necrosis. Since the operation the patient has felt better, his pains have ceased, and the paralysis of the nervus facialis has nearly disappeared; but, strange to say, the lad's affected ear has regained its power not only of recognizing sounds, but of distinguishing musical notes.

THE PROFESSIONAL LIPOMA OF PROSTITUTES.—Dr. Preis (*Weekly Medical Review*) has noticed in 217 prostitutes a sort of lipomatous tumor seated between the sixth and seventh cervical vertebræ over the spinous apophyses. These hemispherical tumors are a little firm, elastic, mobile, and not painful. He considers them to be due to pressure and friction during coitus, and has not found them in those who are not prostitutes.

THE

Journal of American Medical Association.

PUBLISHED WEEKLY.

THE EDITOR of this JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information, should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

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SINGLE COPIES..... 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 65 RANDOLPH STREET,
CHICAGO, ILLINOIS

SATURDAY, MARCH 7, 1885.

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.—As the time is near for the next annual meeting of the association, when the board of trustees charged with the publication of this JOURNAL must make arrangements for the future, I regard it as a duty to give all parties interested as accurate information as possible concerning the past progress, present condition and future prospects of the journalistic enterprise. I shall do this with no feeling of embarrassment or selfish interest, as I accompanied my letter to the board of trustees accepting a continuance of the editorial office, at its meeting in Washington last May, with the explicit declaration that "under no circumstances" could I extend that continuance beyond the present JOURNAL year, which closes with the current volume, June 30, 1885. Those who originated the policy of changing from the publication of the Transactions, in one annual volume, to that of a weekly journal, claimed three leading and important advantages for the latter method:

1. That the reception of a JOURNAL every week containing some part of the doings or papers of the association, and a fair amount of the current items of medical progress in all departments of the profession, would tend strongly to keep up an active interest on the part of each individual member, and induce a much larger proportion of those who once become members to retain such membership by the payment of their annual dues, and the aggregate membership of the association would thereby increase far more rapidly until it should embrace a large proportion of the more active and intelligent members of the profession in all parts of our country.

2. That all the proceedings and important papers of each annual meeting would be given to the profession in the columns of such a journal much earlier, and in such installments that even the most busy members would read and profit by them to a much greater degree than when receiving the whole in one volume nine or ten months after their presentation at the annual meetings.

3. That the JOURNAL, under proper editorial management and ability, visiting the leading members of the profession in each state every week, would exert an efficient and most important influence in maintaining sound principles of ethics; in hastening the general adoption of a higher standard of education, both literary and professional; in diffusing sound principles of legislation on medical interests; and in promoting universal social unity in the profession.

Although less than two years have passed since the first number of the JOURNAL was issued, its effect in retaining and increasing the membership is already perceptible in a marked degree. The triennial list of permanent members of the association has been published by the permanent secretary, in 1875, 1878, 1881 and 1884. The lists of the three first periods indicate the progress of membership during the ten years preceding the commencement of the JOURNAL, and that of the last period the progress during the three years embracing the first eighteen months of the publication of the Journal. The whole number of names of living members in the list of 1875 is 1,428. The whole number in the list of 1878 is 1,989, being an increase of 187 per annum. The whole number in the list of 1881 is 2,403, or a gain of only 138 per annum. The whole number in the list of 1884, which includes the first year and a-half of the publication of the JOURNAL, is 3,247, making an increase for the last three years of 281 per annum, or more than double the ratio of increase for the three preceding years. The publication of the JOURNAL was commenced in July, 1883, with a list of only about 2,500 members and subscribers. On March 1, 1885, the list had increased to 3,887, of whom 3,033 are entered as permanent members of the association and 854 as subscribers. The copies to exchanges, advertisers and correspondents aggregate 120, making the present weekly circulation 4,007. The *British Medical Journal* was commenced twenty years since, with a supporting membership of the British Medical Association of little more than 2,000. It has now a supporting membership of about 12,000, being an increase of 500 per annum.

If the same ratio of increase exhibited above

should be continued, the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION would have, at the end of the first twenty years of its publication, a regular supporting membership of over 15,000. Having furnished the foregoing facts, which will enable each reader to see clearly the past progress and present status of the JOURNAL, in relation to its influence on the ratio of increase of permanent membership, I shall defer the consideration of the second and third topics until the issue of another number.

RAILROAD TRAINS FOR NEW ORLEANS.—We direct the special attention of the readers of the JOURNAL in the Eastern or New England States, to the important notice of Dr. W. E. Anthony, of Providence, R. I., under the head of Domestic Correspondence, on page 279 of the present number of the JOURNAL. Those who desire to attend the coming meeting of the American Medical Association in New Orleans must acknowledge that the railroad companies are disposed to treat them with marked liberality, and it should insure a very large attendance.

CENTRAL FREE DISPENSARY OF WEST CHICAGO.—In the JOURNAL for January 31, 1885, we made some comments on the instability of medical institutions and interests under municipal or political control. They related to the action of the County Commissioners of Cook County concerning appointments on the medical and surgical staff of the County Hospital, and the appropriation of county funds in aid of free dispensaries for the sick poor.

The Central Free Dispensary of West Chicago has occupied rooms in the Rush Medical College building for several years, and has received an appropriation by the Board of County Commissioners, annually, on account of the services of the Dispensary to the poor of the city and county. During the last two years the College of Physicians and Surgeons, located in the same neighborhood, has also opened a free dispensary for the poor; and at a recent meeting of the County Board it was decided to change their annual appropriation from the Central Free Dispensary to that connected with the last-named college. In alluding to this in our previous comments, we carelessly adopted the language of the newspaper reporters, and stated that the Board of County Commissioners had voted to move the Central Free Dispensary from the Rush Medical College building to that of the College of Physicians and Surgeons, when we should have said that the Board had voted to change their *annual appropriation* from one dispensary to the other. The difference is an important one, inasmuch as the Central Free Dispensary is, and has been for several years, an independently incorporated institution, having some means for its charitable work besides the county appropriation, and is in no respect under the control of the County Commissioners, except in so far as relates to the reception of money from the county treasury. It will continue to occupy its rooms in the Rush Medical College, and carry on its dispensary work as heretofore.

STATE MEDICINE.

SANITARY NEEDS.

REMOVAL OF THE CAUSES WHICH CONTRIBUTE TO EPIDEMICS. A COMPETENT AND THOROUGHLY-EFFICIENT BOARD OF HEALTH NEEDED.

Address of DR. W. W. JONES Before the Social Science Association, of Toledo, Ohio.

GENTLEMEN: Since you have invited me to say a few words upon "the sanitary needs of Toledo, in view of the probable approach of cholera," I may commence by saying that the "needs" within our control are such as will promote health and prevent disease under any and all circumstances, with perhaps the addition of some quarantine agencies on its near approach, and more rigid sanitary inspection of emigrants and freight connected with them, also for refuge stations where cases of cholera break out among them while in transit, so that they can be isolated from the healthy.

Prevention of Disease.—It is the modest pretense of sanitation that it prevents disease and mortality; hence its effects are not seen except in the good health of a people and the low rate of mortality, which does not attract attention, and comes to be looked upon as the normal condition of the municipality. The causes of disease, for the most part, which it is the province of sanitation to prevent, are so obscure as to elude the vigilance of the wisest detective, and net the conditions which favor malignancy, and promote its spread when its invasion has occurred, are very generally believed to be known.

These causes pertain to the individuality of the person, his idiosyncrasies, temperament, constitution, and his surroundings.

The first part of this proposition requires the study and discrimination of the physician to learn his particular tendencies to disease. The latter, those influences which are without, and surrounding him, and from which he cannot to a certain extent escape.

It is these influences from without which make it necessary to organize a Sanitary Board and clothe its officers with extraordinary powers, in order that one careless or ignorant person may not be the means of bringing disease and death upon his innocent family or neighbors. Anyone attempting to answer the question of Toledo's needs, in anticipation of any epidemic disease, would inquire, first of all: Have we a sanitary organization which is entrusted with the power, and is equal to such an emergency; knowing

that its success largely depends upon the knowledge, skill and fidelity of such a municipal organization.

In our city we call this a Board of Health, created by a statute of the state, clothed with extraordinary powers—legislative, executive, judicial and ministerial. The complex functions bestowed upon this board require for their intelligent fulfillment the highest intellectual powers and attainments, coupled with a knowledge of what is known in very many of the sciences as applied to sanitation, as well as legal discrimination enough to avoid trespassing upon the just rights of others.

The necessity for such a board in cities is of somewhat recent origin, and is the outgrowth of progress in the human mind in its attempt to stay the mortality of epidemic disease.

Contributing Causes.—It is a well settled fact that whatever conduces to disease in any form will increase the virulence of an epidemic which may prevail for the time being. In this city cases of sporadic cholera are seen every year, and nearly all such cases are recognized by physicians as one of the forms of intermittent fever or ague. So in an epidemic of the same disease (cholera) many of the cases commence as an attack of that disease.

Some of the causes which produce disease in summer are heat, and extreme oscillations from heat to cold, impure water supply, poor or defective food, overcrowded and poorly ventilated apartments, animal and vegetable filth, defective drainage, and escape of noxious gases which contaminate the atmosphere. Some of these causes require, for their inspection and finding out, a class of men with more knowledge and fidelity than is usually found in the ordinary sanitary policemen and inspector. While a man may be a very good policeman to watch over your property and protect your person, he may be so ill qualified to observe causes of disease as to tread over them without notice.

In ordinary times when health is the normal condition and disease the exception, a street commissioner may perform the duty of health officer and sanitary inspector, and the functions of a Board of Health may be exercised by persons elected for other duties without exciting any just comment.

But when an epidemic like cholera invades a community, there comes a frenzied demand for that kind of help upon which reliance can be placed, that all will be done which skill and knowledge can accomplish.

Our whole sewerage system needs to be inspected and its defects remedied. Many years ago it was discovered that the catchbasins leading into the sewers of the lower part of the city *had their traps originally built wrong side up*, and I have heard complaints every year since of their offensiveness by residents and people who have been compelled to pass them. We all know that sewer gases may breed the worst pestilential diseases, and that, when once set up in a family, may spread to widely separate parts of a city, through infection transported by friends and acquaintances, and cannot be easily stamped out except by the strong force which is by law reposed in a board of health.

My observation and experience with cholera in this country has convinced me that it is not contagious, as that term is used in connection with smallpox, measles, mumps, and, perhaps, whooping-cough in children, but that its spread is greatly due to that undefined and undetermined influence of mind upon mind, which is more felt than seen, and which disturbs the individual by its depressant action upon his mental and nerve force.

Many years ago, during our cholera epidemics, I used to see illustrations of this in the Irish emigrants whom I used to be called to attend, who, when asked what was the matter, used to reply, "Och, Doctor, I am sick at the heart."

Though this was a somewhat apt illustration of homesickness, yet when pushed a little further, coupled with the fear of some invisible foe who is to be escaped from, it becomes a panic. The history of our country is full of instances where panics caused by the prevalence of epidemic disease have blasted the prospects of towns and cities for whole generations.

Say what you will of miasma, of germs and other influences which are the potent factors in causing ordinary disease, they exercise less influence in the production and spread of cholera than those just alluded to as affecting nerve force. Every surgeon in the late war knows that it was the scourge of the army. Every physician of extensive observation has seen its blighting effects, and will concur in the statement that it is the first thing to be watched for at the bedside, and its failure most to be dreaded.

People repose confidence in an army in proportion to the perfection of its organization and the firmness, intelligence and experience of its commanding officers. So will a people have confidence in a board of health in proportion as it is made up of those best qualified to grapple with the intricate problems of sanitation.

Cholera in 1849.—In 1849, when the cholera epidemic first appeared in this city (for we were scarcely a hamlet in 1832 and 1834 on its previous advent in the country), the common council organized a sanitary force consisting of a board of health, aided by three or four of our best citizens in each precinct of the city, whose duty it was to call to their aid such nursing and medical skill as they required for the benefit of any who needed it, and also act as a committee for house to house visitation. A crown of laurel should ornament the brows of those men if living, and the highest honors be paid to their memory if dead, for they carried us safely over the pestilence, without as much as a stampede of persons or business. The grass never grew in our paved or other streets, as in a sister city from a human panic, and we are now enjoying the reward which accrued from the courage and fearless exposure of those men who battled the scourge of 1849 in this city.

Epidemic Panics.—The more ignorant, superstitious and poor the population of a city, the more liable it is to become panicky and suffer from an epidemic. An illustration of this happened on the east side of the river in the year 1854. That suburb of Toledo was not at that time attached to the city, and

contained only about one hundred and fifty people. Cholera had been prevailing in the city since May 5 (the first cases having been brought from Galena on the Mississippi river), when suddenly, about the evening of July 4 or 5, cholera broke out in that hamlet, and in twenty-four hours every house, with a very few exceptions, was deserted. Over twenty deaths had occurred during that time, and as I traversed its streets in the evening, twenty-four hours after its advent, I counted a dozen coffins filled with victims abandoned upon the sidewalk.

Scarcely a light to be seen in the houses; they had been abandoned, and their occupants had fled to the farms in the rear, and the towns up the river, where the tales they told and the panics they created caused the death of hundreds of people. The picturesque and thrifty town of Perrysburg lost many of its most prominent citizens. Early in the course of the epidemic, Dr. Robinson, one of the best physicians of that town, sent for me, and when I reached his bedside about eleven o'clock in the evening, he was dying. I can never forget the words he addressed me, "Doctor, I have said much about the want of skill of you doctors of Toledo, because you fail to cure cholera, and let so many people die when there was no need of it. I wish now to say that I take it all back. I have seen and treated it, and my patients have all died. I am dying myself from it, and have no wish to live longer; you can do me no good, the town is full of cases of that disease; go with Dr. Peck, and see if you can do them any good." I worked the balance of the night among the terror-stricken inhabitants, making house to house visitations with Dr. Peck, and returned to the bedside of my medical friend at the dawn of day, but his eyes had meantime been closed in death.

First Case of Cholera in 1854.—The following extracts, from my clinical note-book, of the first case of cholera occurring here in 1854, illustrate the depressing influence generally found accompanying cases of cholera.

Miss ——, aged 20. Arrived in this city on the afternoon of May 3, 1854, in company with an uncle, Wm. H. Hall, Esq., an attorney of this city, from Galena, Ill. Had been where cholera prevailed on the Mississippi river, and a lady had died of it at a hotel in Galena, where they had stopped. She told me that she had been considerably alarmed on the way here, and was afraid she would have it, and it had greatly worried and prostrated her.

"I first saw her at 9 A.M., May 4. She had no perceptible pulse at the wrist; extremities, tongue and skin cold; voice husky, fingers and lips blue; had had watery discharges every few minutes since 2 A.M., with occasional vomiting and cramps in the muscles of the extremities; died at 12.30 M.

What a Board of Health should be.—In the organization of a board of health, it is not necessary or desirable that it should be made up exclusively of physicians or sanitarians. An attorney who can guide the board amid the pitfalls of legal opposition, an engineer who understands the best means of overcoming those physical causes which promote and spread disease, and the sagacious property owner whose pecuniary interest prompts him to act for the best interest of himself and others like him, are as indispensable as the most accomplished sanitarian. All the members of this board should be imbued with that zeal for the cause of humanity which belongs to the just and fearless, and having this accomplishment, petty or partisan schemes will find no favor in its councils, and no fears need be entertained that its individual members will not soon acquire (if they had it not before) the sanitary knowledge which will enable them to accomplish the expectations in their appointment.

The sanitary needs of Toledo, as well as every other city, whether in times of health or sickness, prosperity or adversity, is "a live Board of Health," such as the statutes of the state contemplate. The original forms for their appointment by our municipal code have been changed from time to time to suit the changing phases presented in the life of the different municipalities, their exigencies and their needs, and the views of legislators for the time being. These changes have principally related to the appointment of members of such boards. In some cities these appointments are made by the council, in others elected by the people. In our own, its functions are exercised by a police board. All of these modes of appointment at one time or another have been found to be so objectionable as to invite change.

How constituted: My own opinion is, that the nearer you can get the appointing power to individual responsibility, the nearer perfection such an organization will approach. If asked my plan, I would say, put the appointing power in the mayor or presiding resident judge of your common pleas court, whose reputation would be at stake in appointing fit advisors in life and health. Such a plan may at first strike one as being objectionable. While I admit that it may occasionally prove so, yet all other plans so far tried in this state have been found wanting in one municipality or the other, and sometimes, in attempting to better them, have made them worse. A knowledge and history of the sanitary legislation of the state shows that some has had its birth in supposed partisan necessities, much in needed reform, and more in a desire to improve the physical and organic welfare of the people. Some of its wisest and most efficient provisions for preserving the health of the people of the state (and which I have never noticed in the laws of other states) have emanated from sanitaries of this city, and yet we have never had a special sanitary club to aid, or spur each other on in the business of preserving and propagating the knowledge of how to preserve health, which the most obtuse must admit is worthy of the highest aims to which the individual can aspire. A knowledge of this science, the most important for the happiness and moral good of the race, is not even taught, in its elements, in the public schools. A moiety of this knowledge would deliver our people from the imposture practiced upon them by the innumerable horde of quacks who infest our city and state only to sponge out the lifeblood from a confiding people.

"Life is short and art is long."

Apply the latter to sanitary science, and some appreciation of the magnitude of the subject may be perceived. The ever-changing phases of human life in the individual, in the community and in the nation, from its infancy to maturity and decline, the subtle influences which produce disease, blast the hopes and bring sorrow and pain such as makes life a burden unto very many of our race, agencies which affect innocent children, mature age and embitter the decline of life, are all comprised in a knowledge of sanitary science.

Only the first steps in the long ladder to the goal for which boards of health are organized can be trod in one generation, and one may reasonably fear that a glimpse within the veil where the day is all sunshine will never be permitted to mortal eyes.

Few men can appreciate the benefits to be derived from an efficient sanitary organization in both city and country, and yet all men ought to realize it when medical bills are presented.

This city furnishes support to more than one hundred physicians and their families, when they have any. It is safe to say that their least average cost to the people per annum is $1,000, making an outlay of $10,000 for medical services, besides supporting forty retail drug stores, not to speak of the hosts of traveling and other quacks whose advertisements crowd the newspaper columns and billboards to the detriment of respectable reading matter.

Seeing the indifference which exists even among our most intelligent people in regard to life and health, there is great danger that philanthropists and sanitarians will lose heart and give up the self-imposed task of urging measures which are of the most vital consequence, not only to this, but of unborn generations.

Many years ago a duty was imposed upon me by the Ohio State Medical Society, of visiting and urging upon the general assembly of the state the propriety of establishing a state board of health. While the members of the Legislature heard me patiently and seemed to acquiesce in my views, I found, upon sending detectives to ascertain what they really thought about it, that their answer was, "That fellow wants an office."

Satiated with disgust at the obtuseness of these legislators, and thoroughly convinced that to be one of them, even if I could, would be degrading by mere association, I resolved to return to my own city and spend what influence I possessed among a people who could appreciate honest effort for its own sake, and whose estimation of the benefits of sanitation was not limited by the desire to promote this or that man to a political office.

Thanking you, gentlemen of the club, for the courtesy you have extended in asking me to address you, allow me to express the hope that a new interest may be awakened in the city that shall result in lasting benefit."

At the conclusion of the paper, a lengthy discussion was entered upon, participated in by a number of medical gentlemen and others. The sentiment was substantially universal that what is needed is a health board composed of men in whom the people will have confidence—that such confidence is the best possible protection against a cholera epidemic—and finally a motion was unanimously adopted appointing Dr. W. W. Jones, Hon. Guido Marks, Wm. Baker, Esq., and Hon. Richard Mott, a committee to prepare a bill for presentation to the legislature providing for a board of health independent of the police board.

The association thanked Mr. Jones for his able address, and it was announced that at the next meeting Wm. Baker, Esq., will read a paper on "The Benefits Arising from City Parks."

FOREIGN CORRESPONDENCE.

BERLIN LETTER.

BERLIN, Feb. 10, 1885.

Medical Notes—Syphilis — Pneumonia — Typhoid Fever.—The late lesions of syphilis are treated here with full doses of potassium iodide, from ʒss to ʒij at a dose. Such an amount as this must be given in *full* dilution and preferably after eating. There must of course be always more or less danger of iodism, of fatal swelling and irritation of the mucous membrane, and at Prof. Fraenkel's clinic, not very long ago, a man presented himself with œdema of the glottis brought about by such heroic treatment. Its toleran ce depends very much upon the idiosyncrasy of the patient, and also, I think, upon the extent of the disease. I have seen it written somewhere that the ability to bear such doses without inconvenience was a sure indication of general infection, and from a somewhat extended observation of many hundreds of cases in Berlin, I am inclined to believe that this is a fact. Only exceptionally have I noticed any derangement of the stomach following even the largest doses, when such were given in full solution. One hundred and twenty drops of a saturated solution in a goblet of water will rarely distress the individual. Gummata of the tongue, intractable syphilides and syphilitic paralyses yield more surely to these large doses than to any other plan of treatment. I know of one case healed experimentally with chlorate of potash pushed to its physiological effects, and whether *post hoc* or *propter hoc*, I know not, but the patient certainly improved rapidly and surely. Small doses of potassium iodide, say two drops of a saturated solution well diluted, and taken *very* slowly, is one of the best things I know of for congestive headache. In the earlier stages mercuric bichloride given hypodermically is much used in Dr. Lassar's polyclinik, together with massage. Pneumonia is severely let alone so far as medicines go. Nature is not handicapped with nostrums, and is supplemented by the physician's art only when her own powers become weakened by watching. Careful nursing, judicious and ample feeding and proper ventilation are insisted upon. Careful nursing means a constant surveillance over the movements of the patient, so that he may not improperly expose himself, the administration of food and alcohol (when demanded) at certain regular

hours, and an hourly observation of pulse and temperature, so that the attending physician may be notified of the least alarming change. Starvation diet does not obtain many friends. Fevers eat and consume tissues, and the waste must be compensated for by full feeding: not over-feeding or improper feeding, which may set up gastric disturbances, but just such as the system requires. The intervals between feeding should not be too long, and the restless patient will require quite as much during the night as during the day. Pulmonary inflammations are recognized as due to causes quite different from those which until lately possessed the German medical mind, and with these new views of pathology and etiology have come new ideas of treatment, or rather a belief in no treatment at all, and a reliance upon hygienic detail and nursing. The disease has a tendency to cure itself, if the patient be placed in the best possible condition for nature to assert her powers. This is also true of typhoid fever. An expectant plan is very generally pursued. The alkaloid *antipyrin* (dimethyl-oxychinin), first introduced by Prof. Filehne, of Erlangen, was quite the rage for a time, but interest in it is fast dying out, and clinical experiences do not sustain the hopes that were based upon physiological experimentation. At best, fever is but a symptom of a general condition, and it advances or retrogrades just as the primary cause becomes better or grows worse. The cold pack works admirably over here in excessively high temperatures, and the patients always seem to feel better after it has been used. The iodine treatment has also shown itself to be of little reputation. In those conditions in which the high temperature may be due to irritability of the nervous centres, the pack soothes and controls, and is not followed by any of the distressing symptoms which sometimes attend the administration of quinine, antipyrin, etc. Ulceration of Peyer's patches is guarded against by *absolute* rest, by non-irritating food, and by careful attention to the bowels. Claret is given in full quantities, also other kinds of wine, milk, and good bouillon. Medicines are only given when certain well-defined symptoms seem to demand them. The matter of *rest* is a most valuable consideration in the treatment of any disease, and the surgeon would be less frequently called upon to operate, the physician to prescribe, or the specialist to theorize if it were possible to carry out such a regimen in all of its details in every instance. *Rest, air* and *food* supply the normal demands of a normal body. Every day the science of medicine is emancipating itself from traditional fetters and superstitious vagaries. A walk through the wards of Charité would fill the old-fashioned practitioner with grief, and he would have a poor opinion of Berlin as a medical centre. Réal's treatment of typhoid fever by full doses of bismuth subnitrate is not a success. Koch's views as to the causation of acute miliary tuberculosis and chronic phthisis are now receiving considerable attention, especially from Drs. Biedert and Siegel. Koch, you remember, advanced the theory that when small numbers of the bacilli entered the lungs repeatedly, chronic phthisis resulted, but when a large number suddenly entered the lungs we had a miliary tuberculosis. This theory, highly ingenious though it may be, cannot stand alone; it needs a long line of corroborative proof and parallel investigation. What coincidence limits the number and governs the entrance of the bacilli into the lungs? What is the peculiar idiosyncracy which makes the disease so rapidly fatal in some people? Why is it that some will escape infection even when the conditions for the entrance of the bacilli into the lungs are those most favorable? Biedert and Siegel maintain that phthisis is not an infectious nor a contagious disease, and that the lungs must be already diseased before the bacilli can produce the characteristic changes. In a perfectly healthy organism it is questionable whether the bacilli can produce such changes. Biedert and Siegel's investigations are elaborate and far-reaching; the abundance of material at their disposal gave them every opportunity to vary their researches, and their conclusions will be read with interest. Of course, the bacillus, when found in the *sputum*, is *absolutely* pathognomonic. Such microscopical examinations are made every day in Fraenkel's, French's and Senator's clinics, and in the offices of private practitioners. But the shape of the bacillus is *not* always the same, neither is the relation of the amount of bacilli to the lung affection as yet thoroughly understood. The theory that consumption depends upon the presence of bacilli *only*, cannot stand without a very much larger burden of proof than we yet possess. At present it seems to be held by medical authorities that heredity and extraneous influences impress certain conditions favorable to infection upon the lungs. Dr. Anfrecht, of Magdeburg, believes in the identity of croup and diphtheria, and thinks that local applications are injurious. He uses simple cold compresses and a gargle of chlorate of potassa.

H. R. B.

PARIS LETTER.

PARIS, Feb. 13, 1885.

At a recent clinical lecture at the Hotel Dieu, Prof. Germain Seé thought proper to expatiate on the diagnosis, or rather the characteristic appearances of the eruptions of the various eruptive fevers, as he found that at the examinations for the doctorate, the candidates generally manifested an unpardonable amount of ignorance on the subject. Prof. Seé pointed out the necessity for using the clinical thermometer in such cases, as indeed in all caases of fever, and rendered justice to Wunderlich for his admirable researches on thermometry, which have singularly facilitated the diagnosis of various maladies which would otherwise have been enveloped in obscurity. For instance, apropos of eruptive fevers, the study of the temperature of the body during an attack of fever would be indispensable, as before the appearance of an eruption the exanthematous fevers do not present any pathognomonic sign, and it is here that the thermometer would be of great service to the physician, as even after the appearance of the eruption it is sometimes difficult to differentiate these fevers one from the other. It must, however, be

borne in mind that the elevation of the body temperature is not altogether proportional to the intensity of the eruption; in other words, the study of the temperature would be of value only by the course of the latter, and not by its maximum. For example, in small-pox the initial temperature rises promptly from 98.6° F. to 102.2° F., and on the second day in the evening, or forty-eight hours after, when once the eruption appears, the defervescence is complete, and the variolous eruption follows its course without the thermometer indicating an increase of heat. The thermometer, however, rises again at the stage of suppuration.

Scarlatina begins much in the same way as variola; that is, brusquely; but the body temperature rises much more rapidly, and reaches its maximum in twenty-four hours, and it is then that the eruption appears. But it often happens that the scarlatina passes unperceived—either that the eruption is so pale that it escapes notice, or it may be completely absent (scarlatine fruste of Trousseau); or, finally, it may be very incomplete or fugitive; and yet these sorts of scarlatina may give rise to the accidents observed in regular scarlatina; such, for instance, as Bright's disease, albuminuria, and children will be the more exposed to these complications, as under the above circumstances the necessary precautions would be neglected. This error may be avoided if care be taken to attend to the body temperature. At the commencement it may be that there is fever; it is of short duration, lasting twenty-four hours, but the thermometer reaches, in this lapse of time, 104°F., and no other malady but scarlatina attains this maximum in one day. In any case, Professor Seé would recommend that no patient suffering from scarlatina should be allowed to go out of doors before the twenty-fifth day, for statistics have shown that, nine times out of ten, it is between the twelfth and the twenty-third day that scarlatinous nephrites are declared. It must be borne in mind that in scarlet fever the thermometer remains at its maximum during four or five days, and that the defervescence takes place about the seventh or eighth day; the decline is slow.

Measles commences slowly and insidiously; its course is therefore essentially different from that of scarlatina and variola. Whilst in variola the temperature attains its maximum rapidly and in a continuous manner, in measles there are remissions in the morning, so that during the first two days the physician may be led to believe that he has to do with typhoid fever; but the doubt is dissipated the third day, or when the thermometer marks over 102.2° F., as the body temperature in measles rarely goes beyond this figure. The following is, then, what may be observed in measles: At the commencement there is little fever, but it is not continued; it has the character of remittent or catarrhal fever; then comes on a transitory attack, preceded by shiverings, about the third day; the thermometer falls in the morning from the fifth to the sixth day, and then the eruption appears at the end of this or during the following day. The maximum of the temperature may therefore be noticed from the third to the fifth day, and the defervescence from the seventh to the eighth day. The relative differences between the eruptions are as follows: In scarlet fever, when once the eruption appears, the thermometer rises or remains stationary. In small-pox, after the appearance of the eruption, the thermometer falls rapidly, to rise again on the eighth day, if there is any suppuration. In measles, after the eruption, the thermometer rises again one day, then falls, but slowly. A. B.

DOMESTIC CORRESPONDENCE.

CINCINNATI LETTER.

The unparalleled good health which blessed our city and cursed our physicians for 20 months following the great flood of Feb. '83 was broken last October by an epidemic of measles. In January '84 there were 5 cases of measles *reported* in the city. February 2, March 3, April 4, May 6, June 13, July 10, August 6, September 6, October 104, November 323, December 355; Total 837. Of deaths there were none till July, when one was recorded, August 1, September 1, October 12, November 23, December 31; total 69—one in 12. 13 of the cases reported died. The registrar of vital statistics, however, is authority for the statement that only one case in 3 is reported. Many physicians neglect to report them, although such neglect is finable. Many children are treated by home remedies, or a physician being called for the first child sick in the family, those subsequently ill are treated with the same remedies which cured the first. On the contrary, there were reported 250 deaths during the year, measles having occurred 2 or 3 weeks before the death. As to the history of the spread of the epidemic throughout the city: In January, 1884, it was found in the eleventh ward, starting at a schoolhouse. In March it extended to the seventh ward, immediately south. In April into the thirteenth, west of the eleventh. In June in the twelfth, north of the thirteenth and west of the eleventh. In July it appeared in the tenth, south of the thirteenth and west of the seventh. September found it in the third, east of the eleventh and seventh. In October it appeared with great virulence in the twenty-first ward, in the extreme western part of the city, apart from the wards previously implicated. In November and December it was found in all parts of the city. The river wards, known as the flooded district, escaped with comparatively few cases. The great bulk of the cases were in the region known as "Over the Rhine," inhabited by Germans, and the most thickly populated part of the city. Since the first of the year the epidemic has decreased very rapidly. The epidemic was considered to be of so much importance that it was given two meetings at the Academy of Medicine.

The first meeting was given up to the discussion of the subject opened by Dr. J. C. Cleveland. Dr. Forcheimer reported a severe epidemic which visited the children's hospital. A child was brought in supposed

to be suffering with cerebro-spinal fever, which afterward developed into a fine case of measles. Seventeen cases followed, nine of which proved fatal. The enormous fatality was due, he thought, to the bad condition of the patients at the time of the attack. All of them were confined to the bed with various diseases of more or less gravity. One of them was brought to the hospital in a moribund condition. Dr. Haarf at the next meeting reported "measles and scarlet fever occurring simultaneously in his own family." His five children contracted measles, and three of them had scarlet fever also, one having had scarlet fever before. The interesting part of it is that his wife, who was pregnant at the time, gave birth to a child in an adjoining room to the children, both being heated by the same stove and she being attended by the husband and father, who also attended the children. After all this courting of trouble, as it were, the wife and mother made a good recovery.

One of the remedies used was the hydrochinon, of which the doctor and also the president, Dr. Wenning, spoke very highly. They praised it for its absence of taste, its ready solubility in water, its diaphoretic and antipyretic effect. The epidemic of measles just closing has been remarkable for its complications; pneumonia, broncho-pneumonia, bronchitis, entero-colitis and ophthalmia were those generally noted.

Dr. G. A. Fackler, the Secretary of the Academy of Medicine, reported at the last meeting an interesting case of meningocele occurring in a child whose mother during pregnancy was subject to attacks of hysteria.

Dr. E. S. McKee, at a recent meeting of the Academy, reported a case of "repeated miscarriage successfully treated with chlorate of potassium." The patient had ten successive miscarriages in sixteen years of married life, from two different husbands, occurring from the fifth to the eighth month, no single child coming to term. In the eleventh and twelfth pregnancies she was put on chlorate of potash, from fifteen to thirty grain doses, and both children were brought to term and delivered healthy. One died in infancy; the other still lives. This paper was extensively discussed.

In the year just past, there were 6,609 deaths in the city; 5,667 were residents, 538 were non-residents; 404 were still births. Births recorded, 8,363; marriages, 1,814.

There were 10,646 patients treated by the district physicians during the last year. These received 15,795 prescriptions, at a cost of $4,733; average cost of prescription 31¼ cents. Births recorded, 8,363.

A case of rodent ulcer of the face occurred recently at St. Mary's Hospital under the care of Dr. J. C. McMechan. It occupied the whole side of the face, implicating the orbit and the greater part of the nose. It reached within two lines of the inner canthur of the only remaining eye. The doctor cauterized the wound, and especially the cutaneous edges, with the galvano-cautery. Since this there has been no advance of the disease and the patient is doing well.

Of cocaine we do not hear so much now as before the holidays. Then we heard of little else from our ten ophthalmologists.

Our medical colleges are not so well patronized now as formerly. The decrease this year has been fully 30 per cent. This is laid at the doors of politics, hard times and overproduction. A week from now both our colleges will have had their commencements. The class in the Ohio will probably number seventy, in the Miami about thirty, that is unless there is a larger per cent. of refusals than usual. A medical school in a neighboring city, which has a so-called summer session, has sent out its regular annual bid asking the students who do not pass here to come there and take their diploma. One who failed to pass here last year, being unable to tell the professor of anatomy how many teeth or how many ribs he, the student, had, went to our neighboring city, took his diploma in June, came back here and settled. The spring courses in the colleges here will commence March 15 and continue to the end of April. They are conducted exclusively by the adjunct faculties, and are on the recitative and practical order. Clinical lectures are conducted in the Good Samaritan and Cincinnati hospitals.

There is rumor upon rumor that we are to have a new weekly medical journal. The child has been christened "*The Argus*," and an editorial father found for it, Dr. J. M. French, but the delivery is tedious. If born, 'tis to be hoped that it will be more vigorous than some of its class we now have.

There is rumor upon rumor that we are to have a new medical journal. The child has been christened "The *Argus*," and an editorial father found for it, D. J. M. French, but the delivery is tedious. If born, it is to be hoped that it will be more vigorous than some of its class we now have.

NEW YORK LETTER.

NEW YORK, Feb. 27, 1885.

A scientific meeting of the Fifth, or Southern District Branch of the New York State Medical Association, was held in Brooklyn, on the 25th of February. It was the first meeting of one of the five subdivisions into which the parent association was organized at the annual meeting in November last, and it was an exceedingly successful and pleasant gathering. In his brief opening address the President, Dr. J. C. Hutchinson, of Brooklyn, said that the desire of the friends of medicine represented in it was ultimately to arrange for frequent meetings in Kings and other counties of the district. Having alluded to the remarkable process of the state association, which was joined by more than 500 members during the first year of its existence, he went on to say that mere numbers was not the object. The aim was to get the best material for effective and congenial work on behalf of the best interests of the profession and of the public. One of the great features was freedom from legal control, or complications. The association wanted nothing to do with the legislature, or any other political body. It desired to be free to admit or reject whom it pleased.

At all times ready to give information, when requested, to the civil authorities, executive, legislative or judicial, it still wished no official connection with them; for medicine was a voluntary, self-independent profession, governed by its own rules. At the same time, toward all our brethren of a like faith, but of a different policy, all the Fellows of the association, he knew, would have only the kindest feeling. Men of culture and honor could differ without anger or loss of mutual self-respect. He was persuaded, he said, in conclusion, that as the branch association completed its work of organization and engaged in the professional objects and dealt with the subjects germain to the healing art, their union would be found pleasant and profitable, and one crowned with the approbation of their consciences and with beneficial results to humanity, to science and to themselves.

The first scientific paper was an elaborate one by Dr. J. W. S. Gouley, of New York, on "Contracture of the Bladder, Consequent on Cystitis." In giving an account of the exciting causes of cystitis and contracture, he stated that ordinary polyuria from nervous influences, when maintained for any length of time, was likely to produce these affections equally with conditions of the urine in which the specific gravity was very high, as in diabetes. The explanation was, that when the urine was of low specific gravity, the epithelial cells of the mucous membrane of the bladder, by an endosmotic process, became swollen and then died and were cast away; while, when it was of high specific gravity, the epithelial cells, by an exosmotic process, shriveled, died and were cast away. The final result being the same in either case, the denuded mucous membrane suffered constant irritation from the urine in contact with it. In vesical trouble from enlarged prostate, he claimed that there was universally hypertrophy of the bladder, instead of atrophy and atony, as stated by many authorities, and that although he had witnessed a very large number of autopsies, he had yet to see the first case in which there was atrophy.

One of the causes which he mentioned was the use of ether as an anæsthetic, and he said he wished to allude to this as a warning to surgeons. In thirty cases out of one hundred operated upon for hemorrhoids, he had found that there was contracture of the bladder, originating in the effect caused by the ether inhaled at the time of operation. The action of this agent was twofold—first, upon the kidneys, producing polyuria, and, second, on the urine, which it rendered irritable in character. There was apt to be retention of urine from tonic spasm of the neck of the bladder, and hypertrophy with chronic contracture finally resulted. In order to avoid these unpleasant consequences, he advised that a patient about to undergo an operation should always be required to evacuate the bladder immediately upon taking ether, and again, also, as soon as he recovered sufficiently from the influence of the anæsthetic.

Dr. Austin Flint made some extended remarks on an interesting case of aneurism of the arch of the aorta, in which the difficulties of diagnosis were unusually great, and also presented the specimens from the same. When he saw the patient, in consultation with two Brooklyn physicians, he found some difficulty of respiration, but this was not very great at ordinary times. There was, however, distinct stridor; though careful laryngoscopic examination had failed to detect any abnormal appearance in the air-passages. When an examination of the chest was made, it was found that the respiratory murmur was notably feeble on both sides, and that it was a little weaker on the left than on the right. This was all that could be detected at that time, but before he had left the house he was summoned to see the patient, who was suffering from a paroxysm of the most intense dyspnœa. This was more marked in inspiration than in expiration, and was so aggravated in character that it seemed that he must expire at any moment. In about half an hour, however, he had recovered from it; though within thirty-six hours afterward he really did die in a similar paroxysm. During these paroxysms, to which the patient had been subject for some time, the radial pulse and that of the carotid artery on the left side were found to disappear altogether.

In considering the morbid appearances found after death in connection with the symptoms observed during life, Dr. Flint showed that the ascending, transverse and descending portions of the arch of the aorta were all very much enlarged, while there was marked atheroma of the part present. Under the circumstances he thought it quite remarkable that a loud, bellows-like murmur had not been caused. For the absence of the left radial and carotid pulse during the paroxysms, the unusual distension of the aorta and the consequent pressure on the left subclavian and carotid arteries were sufficient to account. In addition to the general enlargement, there was a pocket, about half an inch in diameter, which protruded directly into the trachea, and which must have caused, of course, more or less obstruction to respiration. It was evident that, if life had been prolonged, the aneurism would have made its way into the trachea and eventually ruptured with fatal result.

Dr. Flint thought that there could be no question that the paroxysms from which the patient suffered were due to the effect of pressure on the recurrent laryngeal nerve; but it was an interesting question whether the urgent dyspnœa noticed was the result of paralysis of the nerve or of spasm of the glottis. It was more rational to suppose, he said, that pressure on this nerve would give rise to paralysis rather than spasm. A question of interest in connection with paralysis of the abductor muscles of the glottis, which he believed to be the real source of trouble, was, Is such a paralysis on one side sufficient to cause death? It seemed to him probable that it was not; but when one side was affected there was a strong liability, through some sort of sympathetic or reflex action, the exact nature of which was not understood, of the paralysis becoming bilateral.

The last paper, on Oleate of Cocaine, was read by Dr. E. R. Squibb, of Brooklyn. The results of the application of the aqueous solution of cocaine to the skin for the purpose of producing local anæsthesia

had, he said, proved very unfavorable. The chief difficulty in its application had appeared to be the difference between the epithelium of mucous membrane and the epidermis, and the impermeability of the latter. There was no possibility of finding a liquid which would pass the epidermis with the same facility as the watery solution passed the epithelium; but it had occurred to him that if a preparation could be made which would pass one-seventh as fast, and if it were made seven times as strong, the conditions would seem to be met for making as successful applications of cocaine to the skin as to the mucous membrane, with the exception that more time would be required, of course, in order to secure the action of the drug. He then gave an account of the various steps by which he had arrived at what he believed to be the most available preparation for use, viz.: one containing 25 per cent. of cocaine, in an excess of oleic acid, a strength just about seven times as great as that of the ordinary 4 per cent. aqueous solution sold in the shops; after which he narrated a considerable number of experiments which he had performed for the purpose of testing the anæsthetic power of the oleate when applied to the skin. He stated that the conclusion thus reached was, that the hope which had been entertained that cocaine employed in this way might prove a useful anæsthetic, had been completely disappointed. Except for certain special applications, as, for instance, to the glans penis, anus, etc., and possibly for the relief of trigerminal neuralgia, in which it had not yet been tried, the oleate of cocaine had to be pronounced a useless preparation.

After the scientific proceedings, a very interesting portion of which was the discussion which followed each of the papers, a bountiful collation was spread in an adjoining room. P. B. P.

TREATMENT OF THE INSANE.

EDITOR JOURNAL AMERICAN MEDICAL ASSOCIATION:

Dear Sir:—The question of the proper treatment of the insane is one which has been ably discussed by specialists and others supposed to be particularly familiar with the subject, and should, therefore, be warily spoken of by the non-expert. But there are some things which common sense teaches where (alleged) science is dumb. Some of these things are likely to strike one with particular emphasis upon his first visit to an institution for the care of insane. The realization of facts is peculiarly vivid, and one receives an impression of the condition of things which is, as yet, not deadened by constant contact. Perhaps such impressions are fanciful and born of sentimentalism; if so, the ever alert and practical boards of charities, etc., will see through their flimsiness and brush aside their sophistries, and they will melt quickly away before the blazing sun of science; if they are real, publicity is desirable. I had the unfortunate occasion recently to take to an asylum for the insane a young man suffering from mental derangement, though quite sufficiently intelligent to understand the cause of his condition, the necessity for its alleviation, and to express a desire to go to the asylum for its treatment. Upon his arrival there he was placed in a ward with some forty or fifty others, none of whom were more intelligent than he, many of whom were much less so, and locked into their company to enjoy the benefits and felicity of their refining and elevating intercourse and conversation. Undoubtedly locks and bolts are necessary in the vast majority of cases, but discrimination is desirable even in insane hospitals. To one who goes there of his own will, and for an understood purpose, conscious of his mental defects and anxious for their relief, they are not only useless, but abhorrent, and tend to destroy what little self-respect and self-reliance the weakened mind is capable of feeling. Whatever his other needs may be, a patient of this kind certainly *does not* need the influence of surrounding minds as deficient, or more deficient than is his own; and to be confined, virtually a prisoner, with his days and his nights a constant routine of alleged pleasures and certain contact with his mental kind, may be a scientific way for the treatment of some insane, but practically I apprehend it is a pitiable failure so far as results are concerned. I will only trouble you to speak of one more point, and that is, the fact that asylum managers should be men of large experience in the general treatment of disease. I hold that one, whatever his natural abilities, cannot graduate from college a full-fledged specialist in the treatment of the insane. When we remember the study and research which has for years been devoted to this subject, its importance as a public charity, its relations to the unfortunate beings who made its existence necessary, it is nearly a mockery to find at the head of one of these institutions, containing 500 or 600 people, a man of small experience in years, absolutely none in the general practice of medicine, and, as I am credibly informed, only three or four years a graduate of a medical school. Comment would appear to be superfluous; but as the craze now is for specialism in medicine, this institution seems to afford its realization; is, indeed, its utopia.

I am, yours truly,

J. B. STAIR.

DETROIT, MICH., Feb. 17, 1885.

TO THE EDITOR OF THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

In your issue of February 14, there is a review of the 2d edition of my "Manual of Bandaging," signed by "E. W. A." As this review contains statements that are far from the truth, I ask you for the liberty of replying.

The reviewer starts with the assertion that the book "is full of references to charpie, plumasseau, gateau, boulette, bourdonnet, cataplasma carbonnis, and other strange and barbaric things which modern surgery has no use for."

In reply to this charge, permit me to say that on just *three*, no more, pages of the book, where their definitions and descriptions are given, do these terms occur; hence this statement of the reviewer is decidedly untruthful. Neither was I aware before that such pharmaceutical terms as "cataplasma carbonis,"

"charpie," etc., were "barbaric," since these terms are found in all our standard works upon pharmacy and surgery.

Another misstatement is the following: "The preface informs us that the work has been used in medical colleges, *but there must be some mistake about this.*" (Italics mine). As the reviewer is so ready to assert that I was mistaken when I wrote this statement for my preface, I would refer you, to confirm *my* correctness, to the catalogues of the two Schools of Medicine at Ann Arbor, Mich. It is not necessary to name others, as I might do, in order to show the incorrectness of *his* statement.

As to the assertion "that a student who should make this manual his authority would be a veritable Rip Van Winkle," it can be best answered that the very day your *Journal* was received an order came from a Chicago house for *ten* of these "Rip Van Winkle" books, this being the *third* shipment of them to your booksellers this winter; also, just a short time previously, fifteen copies were ordered by the house-surgeon of Mt. Sinai Hospital, New York city, for their nurses; that one edition of the book has been sold, and that the second is now nearly exhausted.

As to the fault found because I used scientific terms to name a bandage, I would say that *only* anatomical terms are made use of, and I do not hold myself responsible for the terms other generations have given the different portions of the human system. I simply made use of these terms because I supposed the merest tyro of a medical student knew his anatomy sufficiently well to know what I meant when speaking of, for instance, the "occipito-sternal triangle." To aid such as "E. W. A.," who object to anatomical terms, I have always given the *common* name of the parts covered by the bandage when such has been possible; and rarely, I am free to say, has the common name been as plainly descriptive of the bandage as has the anatomical. If one knew little or nothing of anatomy, then the common name, which "E. W. A." seems to prefer, would be the one to use.

Your reviewer also states that I purloined or compiled my Manual from "one or two little works on bandaging which are still extant upon the shelves of older practitioners."

This is a grave charge, Mr. Editor, and I pronounce it as absolutely false, and call upon "E. W. A." for the names of these "two little works."

Yours truly,

C. Henri Leonard.

Providence, R. I., Feb. 18, 1885.

Editor Journal American Medical Association:

Will you please notify the delegates to the American Medical Association from New England that arrangements have been made to run a special train from Boston to New Orleans for the accommodation of physicians and their families. Leaving Boston on Friday, April 24, at 3 P.M.; Worcester at 4.20; Springfield at 6.15, arriving in New Orleans on Monday 27th, at 9 A.M. Returning, leave New Orleans Friday, March 1, about 6 P.M. The fare for the *round trip* will be from Boston, $41.50; Worcester, $40; Springfield, $38.50. Further particulars and tickets to be procured from Dr. W. E. Anthony, Providence, R. I.

Respectfully yours,

W. E. Anthony, M.D.

NECROLOGY.

William Braithwaite, M.D., the well-known English physician and surgeon, and the founder of *Braithwaite's Retrospect*, died recently at his home in Leeds, in his 78th year. He commenced the practice of medicine in Leeds in 1830, and filled several posts of trust in the hospitals and infirmaries of that city. The first number of his *Retrospect of Medicine* appeared in 1840, and has now reached the 90th volume. It has been republished in America for several years, and is as widely-known and valued here as in England. The publication will be continued under the direction of his son.

MISCELLANEOUS.

Micro-organisms and the Germination of Plants.—M. Duclaux has recently sent a communication to the Académie des Sciences on "The Germination of Plants in Soil Freed from Micro-organisms." He chose for his experiments the Dutch pea and the haricot bean, the first of which has its cotyledon in the earth, the second on the surface. The soil having been sterilized before the seed was sown, germination did not take place. This soil was also covered with milk, but this was not altered. Thus it seems that it is essential to germination that there be micro-organisms in the earth.

Mr. Pasteur thus also states that he has found, by experiment on animals, that food which is free from micro-organisms cannot be digested, as they are necessary to the process of digestion.

The Massachusetts Emergency and Hygiene Association, says the Boston *Medical and Surgical Journal*, February 26, 1885, has prepared a course of five lectures on School Hygiene, to be delivered in the hall of the English High School in Boston. They are: "Heating and Ventilation," by F. W. Draper, M.D.; "The Use and Care of the Eyes, especially during School-years," by C. H. Williams, M.D.; "Epidemics and Disinfection," by G. B. Shattuck, M.D.; "Drainage," by Frank Wells, M.D.; and "The Relations of Our Public Schools to the Disorders of the Nervous System," by Charles F. Folsom, M.D.

The Yellow Fever Microbe.—The *Lancet* states that recent experiments made by Messrs. Mozly and

Harrison have served to throw discredit on the conclusions of Dr. Domingo Freire, of Rio Janeiro, who has been so loudly praised by the lay and medical press as the discoverer of the pathogenetic element of yellow fever, the *micrococcus xanthogenicus*. According to these observers he has mistaken septicæmia in the lower animals for yellow fever, which confirms the observations of the Havana Yellow Fever Commission of the National Board of Health.

"BABYHOOD" is the title of a new, large, double-column monthly of thirty-four octavo pages, well illustrated, full of good and practical reading matter, and devoted exclusively to the care of infants and young children, and to the general interests of the nursery. It is under the editorial charge of Leroy M. Yale, M.D., and Marion Harland, of New York. The subscription price is only $1.50 a year, and its office is 18 Spruce street. It is essentially a family magazine.

FIREPROOF INSANE ASYLUMS.—The Boston *Medical and Surgical Journal*, of February 19, says: Why should not Massachusetts, at least, have a law in her statute-books that no new building should be occupied as a dwelling-place for any of those in her care until a report had been made in writing to the Governor by a proper board of fire experts that it was fireproof and thoroughly provided with fire apparatus?

COCAINE DISKS.—Dr. Joseph E. Warren, of Boston, suggests that the most convenient form for using muriate of cocaine in ophthalmic practice is that of gelatine disks. He has used these disks with much satisfaction. Each one contains about half a drop of an 8 per cent. solution (gr. $^1/_{25}$). This is a more economical method of applying the drug than that of using a solution.

THE TURIN PRIZE.—The Royal Academy of Turin will award a prize, in 1886, of $900 to the author of the best work that appears between 1883 and 1886, on any subject connected with physics, chemistry, physiology, geology, geography, or statistics; or to the author of a brilliant and useful discovery. This prize is open to competitors of all countries.

NEPHROTOMY AND NEPHRECTOMY IN MINNESOTA.—Dr. Berry, of New Ulm, performed the operation of nephrotomy almost two years ago, with success. Dr. French, of Minneapolis, performed both nephrotomy and nephrectomy in 1884; and Dr. Wheaton, of Minneapolis, has recently had a case of nephrotomy.

ADULTERATIONS IN QUININE.—Dr. Cyrus Edson, of the New York Health Department, has been buying quinine at forty or fifty drug stores, and the city chemist has discovered that many of the samples are greatly adulterated. In some cases the adulteration of what had been sold as a pure article amounted to 50 per cent.

DRS. KOCH AND KLEIN.—The *British Medical Journal*, of January 31, in giving a *résumé* of Dr. Klein's report from India on the cholera bacillus, states that Dr. Koch appears to recognize that he has not established the fact that the comma-bacillus is the cause of cholera, and that he proposes to return to India to make further investigations, at the earliest date that his duties in Berlin will permit.

CANCER A FREQUENT CAUSE OF DEATH IN HORSES.—The *Indian Medical Gazette*, quoted by the New York *Medical Record*, says: As in England, melanotic cancer is an ordinary cause of death in Bengal among gray and white horses. We can scarcely drive through Calcutta without seeing animals having the characteristic globular tumors beneath the skin.

THE SECRETARY OF THE WEST VIRGINIA STATE BOARD OF HEALTH.—Governor Jackson has appointed Dr. L. D. Wilson to the office of Secretary of the State Board of Health, *vice* Dr. James E. Reeves, resigned.

ISOLATION OF PHTHISICAL PATIENTS IN AUSTRIA.—The Austrian Government has recently ordered that all phthisical hospital patients be isolated, and that such precautionary measures as necessary be adopted against the extension of the disease.

A NEW MEDICAL JOURNAL.—The *Eco Cientifico de las Villas* is a semi-monthly journal, which has recently commenced publication in Sagua la Grande, Cuba. It is edited by Dr. Augustin W. Reyes, and is devoted to medicine and agriculture.

FRENCH MICROBIOLOGICAL LABORATORIES.—The French Government has recently sent M. P. Gibier to Germany for the purpose of studying the organization of laboratories of microbiology.

PROFESSOR BIRCH-HIRSCHFELD, of Dresden, has been appointed to the chair of Pathological Anatomy at Leipzig, the chair made vacant by the death of Professor Cohnheim.

THE annual meeting of the Louisiana State Medical Society will be held in New Orleans, on April 21, 22 and 23.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE HOSPITAL SERVICE, FOR THE WEEK ENDING FEBRUARY 21, 1885.

Battle, K. P., Assistant Surgeon, to proceed to Pittsburgh, Pa., for temporary duty, February 19, 1885.

RESIGNATION.

Heath, W. H., Passed Assistant Surgeon, resignation accepted, as tendered, by the Secretary of the Treasury, February 14, 1885.

PROMOTION.

Kalloch, P. C., Assistant Surgeon, promoted and appointed Passed Assistant Surgeon by the Secretary of the Treasury, from March 1, 1885, February 19, 1885.